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STRIKE RIOTS AT NELSON.

The disgraceful proceedings in connection with the strike at Nelson, during which the mill of the employer who is resisting the arrogant demands of the operatives has been attacked, the life of one of the overlookers endangered, and the non-unionist weavers waylaid and assaulted, prove to a demonstration—were any such needed—that it is high time our judges were given an opportunity to re-consider the stupid pronouncement they made last year in the Plymouth case, which has ever since been a direct incentive to outbreaks of violence in almost every instance of a strike. The cardinal fact requires recognition that when a strike takes place the striking workpeople sever their connection with their employer, and that both he and they are at perfect liberty to pursue any course they like, he to obtain fresh workers and they to obtain new employment without let or hindrance; and any interference with these rights should be sternly repressed. Judges who cannot see their way to affirm this principle have only a very imperfect conception of the law, and of their duty in administering it. The local authorities of Nelson are having a harassing time of it, and the community is being involved in great expense, a large number of police having been drafted into the town to assist in preserving order. Of course, the bill will be to pay for this, and the inhabitants ought to have some power to compel the local weavers' union to pay it. At a mass meeting of weavers, held on Monday night, the weavers present rejected the terms of settlement agreed upon by their representatives and the proprietors of the Walverden Mill, at which the strike exists. The unconditional discharge of an overlooker and of the non-unionists working at the mill is now required. There is some talk among Nelson manufacturers of a general lock-out in the town. This is certainly a step that would be well deserved.

BRITISH MANUFACTURERS AND THE CHICAGO EXHIBITION.

Last week a meeting of the Committee on Textile Manufactures, in connection with the forthcoming Chicago Exhibition, was held at the offices of the Society of Arts. Mr. Charles Malcolm Kennedy, C.B., chairman of the committee, who presided, stated that the applications for space in the textile department at the Chicago Exhibition were unsatisfactory, in consequence of the feeling against the McKinley tariff—a result at which it would, we think, be absurd to express any surprise. He urged the importance of having a good representation of the textile industries of the country at Chicago, having regard to the fact that strenuous efforts would be made by the Americans, and also by the Germans, to divert the trade now carried on by English houses. The strenuous efforts of the former, as the committee must be well aware, have long been made, having started thirty years ago, and been continued to the present day with ceaseless persistence; and they will be continued henceforward as long as the present corrupt party of politicians can maintain their grip upon place and power. And the chairman must further be aware that throughout all this time they have spared neither fair nor unfair means to destroy all the trade our manufacturers have been able to do with their country. Is it, therefore, to be wondered at, with this knowledge

and the treatment English manufacturers have experienced at their hands, that the latter do not care to make any particular effort to throw chances of piracy in the way of such competitors, especially when they will have no opportunity of recouping themselves for their outlay except under conditions that preclude the slightest chance of success? Mr. Barber stated that the linen manufacturers of the north of Ireland would be fully represented. This, of course, may be proper enough from the point of view of linen manufacturers. Notwithstanding the most strenuous efforts, the Americans have as yet quite failed to make even a linen pocket handkerchief; hence if they want linen at all they are bound to resort to English or Continental sources, whatever the impost upon it may be. Hence the linen trade may properly make any exhibit that will stimulate purchasers to buy. A discussion ensued, during which it was generally agreed that the non-representation of our textile manufactures would be most injurious to the trade generally. No doubt this would be the conclusion of the gentlemen assembled, who in the main approve of the scheme, otherwise they would not be thus endeavouring to promote its interests. Other manufacturers are, however, quite as strongly convinced that the opposite course is the right one to follow, as, after the determined and unscrupulous efforts to crush their trade that commenced with the advent of the Republican party to power, now a generation ago, which have been persistently continued throughout all that long time, and which have culminated in the McKinley tariff, they can hope for no advantage to accrue from it. That is the reason why the applications for space are so unsatisfactory. In this we thoroughly agree with their conclusions, and have given voice to them since the initiation of the project. We repeat what we have stated before, that the only inducement that should lead an English manufacturer to care to exhibit at Chicago would be that it might afford an opportunity of giving the Americans an object-lesson in economical matters; and in order to do this it would be needful for him to exhibit on his productions the prices at which they could be sold retail in America if permitted freedom of entry. Of course we are aware that this proposal, which originated in these columns, has been informally conceded by the American Commission; but it ought to be done by an express resolution, otherwise exhibitors may find some morning a request made to them to remove such particulars, as not being within the compass of the official regulations. One cannot be too careful when dealing with the American Republican party. This point properly assured, the matter of exhibiting might then be considered.

OLD AGE PENSION SCHEMES.

The public are hearing a great deal about pension schemes of one kind and another at present, and from one source and another. This subject has arisen out of the socialistic agitation. The leaders of this movement have always at their tongue's end the dreadful fate of the "worker" when sickness or old age steals upon him. The provision society has made in these cases in the poor's house, mis-named the workhouse, is constantly held up as a horrible bogey, as something at which every working man shudders, and as a disgrace to our so-called civilization. Of course the people who speak and write thus know absolutely nothing about the matter; they are simply voicing an ignorant though withal a praiseworthy sentiment, which, to their credit be it said, is widely prevalent amongst the most honest and industrious sections of the working classes. This is the dread of becoming pauperized, which is looked upon as a degraded and degrading condition. The

taint of pauperism clings to a family for a generation or two after the fact has ceased; and if the fact becomes known amongst their neighbours, it too often produces social shyness. Hence the dread of the workhouse. But to the friendless aged, orphans, and those incapable from the various ills and accidents of life, there can be no taint of disgrace. All such cases become the proper charge of society. But where such individuals have friends capable of undertaking their maintenance it is a social disgrace to them not to perform their duty. It is equally a social disgrace, and the taint of pauperism ought to adhere, when persons who are quite capable of maintaining themselves take advantage of the provision made by society for others. It is also a disgrace, when, by self-induced distress, the idle, the dissolute, and the vicious are driven to seek the same harbour of refuge. In these cases society does well to look down upon them. But in all cases there ought to be careful discrimination. It is the want of this that makes the charge of the modern socialist of any importance or force. Therefore, before society is asked to assume the burden of making provision for old-age pensions, it should carefully ascertain in and to what extent the existing arrangements have failed. This, we think, will be only to a very limited degree, and that the sentiment on which the socialist is trading is educed more from tradition than fact, being a remnant from the bad old times of the first half of the present century.

HOW COTTON OPERATIVES REGARD THE PENSION SCHEMES.

It seems from the manner in which the schemes for providing pensions for workpeople have been received that there is not much chance of their acceptance unless the State provides the whole of the fund. The workers will never, without the most serious resistance, submit to enforced thrift for the purpose of purchasing a deferred advantage. This disposition on their part has just been shewn in a conspicuous manner by the way the employés have received a proposition of the kind from one of the largest firms, if not the largest and most important, in Lancashire. As already reported in these columns, the well-known manufacturing firm of Horrockses, Crewdson, and Co., of Bolton and Preston, a week or two ago proposed to their numerous employés the formation of a pension society for the payment of a weekly allowance in cases of sickness, for granting temporary relief in distressed circumstances, relief during stoppages for repairs, medical aid, and medicine, retiring gratuities or superannuation, insurance in case of death, and payment of funeral expenses. The firm proposed to contribute £1,000 a year, and the workpeople were to subscribe on a scale to be fixed by an actuary. A vote of workpeople was taken in both towns, with an adverse result, 1,144 being in favour of, and 2,357 against the scheme. Many did not vote. The trades-union officials are against the pension proposals, because it is feared they will injuriously affect the unions, but it is said the firm are determined to persevere. In view of this fact, which we believe would prove typical of the receptions that would be met with either by individual or State proposals, we ask why should the public trouble about the matter until a much better case has been made out for so doing? We are approaching a general election, and the schemes that are being so much discussed are the baits with which professional politicians are fishing for democratic and socialist votes. If ever such propositions are carried into effect, the funds will inevitably, under such a régime as prevails at the present, have to come out of the

pockets of the middle and upper circles of society, the classes, not the masses. After the emphatic manner in which this scheme has been rejected, we fail to see what good end the firm can accomplish by persevering with it. If they choose to endow a fund entirely themselves from their profits they may manage something, though even then we are afraid that before it could assume large dimensions the trades-union officials would demand its distribution as constituting in reality a subtraction from the wages fund which ought to have gone into the pockets of their clients. And on refusal their mills would certainly be "struck." It will be prudent, we think, on the part of the management to reconsider their views in the light of modern tendencies amongst the working classes and professional politicians.

THE WOOL TRADE IN AUSTRALIA.

Our Sydney advices report that when the mail left there had been an extremely busy week in the wool market, competition having been markedly active. The wools coming forward were from the Monaro and other mountainous districts, and were inferior in point of condition to the clips dealt in a couple of months before. Really superior greasy merino was in scant supply, but American buyers competed keenly for the offerings on hand. The attention of woollen manufacturers cannot too frequently be drawn to the operations of the Americans in the Australian market. Their purchases now include some classes of wools which were not formerly imported largely by the United States. Medium wools for the Continent were enquired for freely. There was an occasional fall in prices of burly, washy, and seedy parcels. Cross-bred varieties of the staple, when not too coarse or irregular, were still keenly sought after by Yorkshire buyers, the most desirable descriptions realising up to 9d. per lb. for fleece and 9d. for lambs'. Washed fleece wools, although meeting with a fair enquiry from speculative and Yorkshire operators, were comparatively neglected. One or two clean sound parcels had sold at up to 11½d. per lb., but fatty and skirly lines were neglected. Messrs. Dalgety and Co., Melbourne, have prepared the following interesting table dealing with the total exports of wool from all Colonies for the current season as compared with shipments at a corresponding period in the preceding year:—

AUSTRALASIAN WOOL EXPORTS FROM JULY 1 TO DECEMBER 31ST, 1891.				
Colony.	1891.	1890.	Increase.	1889.
New South Wales.....	353,966	263,423	90,543	309,580
Victoria.....	327,519	252,530	74,989	292,504
South Australia	129,411	116,760	12,651	132,568
New Zealand	88,790	84,017	4,773	75,698
Queensland	93,475	86,914	6,561	79,608
Western Australia.....	9,820	11,125	—	14,151
	1,002,981	814,769	189,517	904,109
Deduct decrease.....			1,305	
Net increase			188,212	

From the foregoing figures it will be noted that the shipments of wool for the current year were, at 31st ultimo, 188,212 bales in excess of last season's export, and 98,882 bales in excess of the quantities despatched during the first six months in season 1889.

THREATENED CRISIS IN THE COTTON TRADE.

Our Oldham correspondent writes: "It would almost appear from what has transpired recently that we are on the eve of an important crisis in the cotton trade. For some years the operatives have been making good their organisations, and more recently have been increasing their funds and becoming dangerously aggressive upon the non-unionists. While all this has been going forward, the employers have been grappling as well as they could—

mainly single-handed—with the forces which were arrayed against them by the wage-earners. Gradually they have come to see that combination was essential to combat the attitude taken up by the workers, and at last they have federated. Already it is said the possessors of 17,000,000 spindles have thrown in their lot with the new organisation, which is practically, we presume, the outcome of the United Cotton Spinners' Association. No sooner, scarcely, have they come into existence, than an attempt is likely to be made to assert their position. The present condition of the trade, which, as everyone knows, is sadly depressed, is really responsible for the early endeavour to bring the federation into active operation. The keynote is obtained from the annual meeting of the Oldham Master Cotton Spinners' Association, which was held on the 19th inst. Here it seems the committee were empowered to take action; it is presumed to effect a curtailment of production, with the view, probably, of relieving the present strain. On the other hand, the operatives have made no disguise that they were preparing for a time when a conflict between capital and labour will take place. It would appear, therefore, we are drawing sharply up to this point. Indeed, one almost fancies hearing afar off the clash of arms. It is understood, I believe, that the committee of the Oldham Association is to bring the matter of short time or a reduction of wages before the next meeting of the executive of the Federation of Cotton Spinners, which will be held in Manchester in a week or so. So far as I can learn there is much satisfaction, if not jubilation, amongst those engaged in the cotton trade at the formation of the new Federation, which they anticipate will put them in the position of being able to grapple with the operatives' organisations, and the better to give effect to their wishes on questions affecting their interests."

AMERICAN LINEN: A SAD FAREWELL.

"Rummy coves" are numerous in this world, if we can believe Mr. Clegg, the eccentric *cocher* who had the honour of driving Mr. Bultitude once on a day. Probably Mr. J. Carmichael Allan is of a similar opinion by this time. This gentleman, the reader may remember, had selected for himself the task of establishing on the American continent a linen industry which should enable the United States, after supplying its own wants, to furnish the other Republics of the New World with flax fabrics, and thus to dispense with the products of European "pauper labour." From the railroad magnate with an income of a dollar a minute down to the Hungarian and Italian labourer in the coal mines of Pennsylvania with his 65 cents a day, the citizens of the only great and glorious Republic were to be clothed in American linen. The miner working for 15s. a week would be able to get his linen shirts made in America from American flax. He would thus be spared the painful necessity of encouraging the odious trafficking in the pauper products of effete Europe, which it was the object of the McKinley Bill to checkmate and destroy. Mr. Allan, seizing time by the forelock, appeared as an angel of light upon the scene at the very moment when America, peering anxiously through the mists of the Atlantic, awaited the coming of the pioneer who should clear the way preparatory to the establishment of the new industry. It is an old story how Mr. Allan came, saw, and got the money to start a mill. Various rumours have been current for some time as to the progress of the scheme, most of them agreeing that only the commonest goods had been produced, instead of the superior grades which were at first promised. Much of the cloth was said to be unmarketable, so that the capitalists in-

terested in the scheme must have been profoundly disgusted. So it would seem, if a report which appears in a contribution from New York recently published is to be believed. In it the writer asserts that "the linen people here are deriving a considerable amount of satisfaction from the fate which has befallen Mr. J. Alan Carmichael (sic). This gentleman was particularly officious at the time when the tariff was under consideration, and, owing mainly to his misrepresentation of the possibilities of manufacturing fine linens from American flax, the linen schedules were given their present shape. He paraded his great experience gained on the other side, and so impressed a number of Minneapolis capitalists that they embarked on a linen manufacturing enterprise, built a large mill at Minneapolis, put Mr. Carmichael in charge, and with a great hurrah asked the country to stand and see what great things would be done. The country has not paid much attention to them or their works. And it was as well. They never got beyond coarse crashes, and it now transpires have had to import their flax for those. The Minneapolis people have had enough of Mr. Carmichael, and he is now seeking fresh fields in which to apply to American flax his further experience. The new company at Chicago, of which by the way nothing further has been heard, ought to afford him good opportunity. The Minneapolis concern, it is stated, has gone almost entirely on to flour bagging, and the American linen myth numbers another victim." By "Mr. J. Alan Carmichael" our old friend Mr. J. Carmichael Allan is evidently meant. It will surprise many to hear of the fate which has befallen that gentleman, whose letters, written from Belfast prior to his departure for the States, were of a very glowing character. We saw some of these epistles, which had been addressed to a New York firm, and it appeared from them that Mr. Allan had a very lively faith in himself and in the prospects of American linen. The *Dry Goods Economist*, thinking it would be in with the swim, vigorously championed the cause of the yet unborn industry in general, and of Mr. Allan in particular. After the pangs of parturition were over, the young infant's progress was watched most tenderly. And now, alas! what do we hear? A correspondent comes forward at an opportune moment. He pictures the situation in the following style, and from it draws an appropriate moral:—

If Dame Fortune won't smile, and troubles come fast,
If Providence gives nought but whacks,
Pray think of the scheme—now a thing of the past—
To produce American flax!

When McKinley'd taboo'd with his tariff so high
Of Europe's productions the sale,
Americans said, "To make linens we'll try,
And also make Ulster look pale!"

So they built them a mill, subscribed all the cash,
And thereupon set about bragging
Of weaving rich damasks instead of coarse crash—
But said not a word about bagging.

Our hopes, here to-day, to-morrow are gone—
Most likely are dead in an hour—
The truth of the proverb is proved by the fact
That that mill now makes sacking for flour!

WHY DO NOT LINEN MANUFACTURERS BUILD MILLS IN THE STATES?

Many people would reply to the above question by saying, "Because the American climate is absolutely unsuited for the business." We have from time to time published a good deal of matter which would apparently go to confirm this view. We are not, however, prepared to admit unreservedly that the answer given is a satisfactory one, nor do we think that in Belfast itself commercial men believe that if the managers of Ewatts, the York-street, the Bessbrook Company, the Brookfield Company,

or some other Irish linen firm with capital and energy behind it, chose to make the attempt, they could not succeed in producing high-class linens in the United States. The efforts so far made to establish the industry have not had the best of experience behind them, both this country and the Continent having held aloof. It has been mentioned to us, and we believe there is much in the suggestion, that in the present condition of the linen trade no manufacturer would care to run the risk of transferring the seat of his operations to the United States. The linen industry is not in a healthy condition. In many respects it is actually declining, while even in Ireland, where it has taken root the most firmly, it does no more than hold its own. Such industries as those of cotton and jute have grown steadily during recent years, while that of linen has not, as the following comparisons shew. The figures represent thousands:—

	Cotton.		Jute.		Linen.	
	1874.	1889.	1874.	1890.	1874.	1889.
No. of power looms.	465	615	9	14	41	48
" spindles	37,515	49,511	220	286	1,473	1,134
" doubling sp. . .	4,366	5,992	9	11	81	61
Persons employed .	479	528	37	44	228	107

Our table shews that in the period selected for comparison, there has been a falling-off in the linen trade of 21,000 in the number of persons employed, of 20,000 in the number of doubling spindles, and of 339,000 in the number of ordinary spindles. In power looms there had only been an increase of 7,000. The statement that the linen industry is not an expanding one is, therefore, amply borne out by official figures. It may even be said that it is a declining one, as the above statistics referring to the United Kingdom in effect shew. On the Continent the trade is subject to the same adverse influences which operate to its disadvantage in our own country, the decline in some portions of the Continent having been very great. In the United States, as in Europe, influences are at work which operate against linen. There, as here, cotton and jute goods compete with those made from flax. Obviously if at home the industry goes back, it cannot permanently expand in the United States. Up to a certain point—that at which it succeeded in supplying the demands of the American population—it might, under the most favourable conditions (which are not likely to prevail), grow, but even if Europe did not exist to compete, the difficulties against which linen manufacturers have to contend would be present. Under the circumstances it is not surprising that the latter prefer not to make risky experiments such as establishing mills in the States would be. The unanimity of opinion on this point is wonderful, for no European firm has attempted to weave a single yard of linen in the United States since the passing of the McKinley Bill. So far that measure has, therefore, increased the price of goods without keeping them out of the market. A slight re-adjustment of qualities to fit in with the altered tariff arrangements has been necessary, but the volume of trade keeps up.

THE EAGLE SCREAMETH.

From a discussion of this serious subject we turn to another, which, though relating to the United States, is calculated to produce the same effect as one would expect to result from a perusal of some choice humourism of Artemus Ward, Mark Twain, or Bill Nye. We are not certain whether the *Johnstown Tribune* was aware of the intense comicality of the language in which it recently indulged in discussing England, Reciprocity, and other matters. But whether it was funny we leave the reader to judge. Speaking of the Chilean affair, the *Tribune* says:—

Great is Egan—Once great because he is himself. Twice great because Chili confesses it and will not

demand his recall. And thrice great because he has brought upon his devoted head the impotent rage of England.

Johnny Bull is fairly boiling over. His mouthpiece, the *St. James's Gazette*, publishes an article on the relations between Chili and the United States, which it heads "An Irish Boss as a Diplomat," and then it goes along like a little boy, saying nothing except to call us a "big, ignorant Democracy," and to compare our Government with the "Vast semi-Asiatic despotism."

Look here, England, you come out into the open and say that again. We don't ask you to come over into our yard, for we have no big brother and don't need one; but just you come half way across the Atlantic and let out a yawp like that, and we will warm your little trousers for you as we have done twice already, only more so.

We've got you down fine, England, you little, insignificant bundle of contraries, and as for the rest of the world, let it rest. Don't you worry about US and Chili. We're better friends than ever now, or will be soon, and Reciprocity is, to use your own choice language, "a blooming success."

It won't do, Johnny. You're not in it, at all, and you know it. You know you're about done for, and that you aren't turn, except in "Darkest Africa" or "Darkest England." We may be an "ignorant Democracy"—which we deny—but we are at the same time a triumphant one, and Egan is widd us. See?

Can the writer of the above be identical with the "cantankerous blockhead" who wrote to *The Times* the other day about reducing England to a fourth-rate power? It is hard to believe that even the vast Republic can produce more than one sample of such remarkably curious freaks of nature as the possessors of such intellects must be.

FLUCTUATIONS IN THE PRICES OF COMMODITIES.

The *Economist* has just published its annual trade summary for 1891, with the usual comparisons shewing the wholesale prices of various commodities, mainly in London and Manchester. The average rates for the six years 1845-60 are given, together with those for selected dates 1869-90 and 1891. The result is, of course, to shew a great decline on the whole, despite occasional fluctuations. The *Gazette* price of wheat, which averaged 53s. during the period 1845-50, fell to 28s. 7d. in 1889, and was 36s. 10d. at the beginning of this year. Raw Cosimbazar silk was 9s. to 14s. per pound in 1845-50. In 1869 the price was 16s. 6d. to 25s. 6d. In 1885 the rates were 8s. to 12s. 6d., the present quotation being about 13s. It is difficult to draw any deductions of importance from this information, as only one class of the raw material is specified. We know, however, that raw silk is cheaper to-day than has been the case for many years past, a comparison of prices for both European and Eastern growths having appeared in *The Textile Mercury* recently. The downward tendency of flax prices during the past half century is shewn by comparing the rates for St. Petersburg 12 head with those of the present time. We give the comparison below for a few selected periods, together with that for flax yarn (60's):—

	Flax per ton.		Linen yarn per bundle.	
	£41 to	£47	—	—
1845-50	£41 to	£47	—	—
1869	41 to	47	5s. 3d.	—
1873	38½	—	5s. 3d.	—
1877	38½	—	—	—
1879	35	—	4s. 3d.	—
1884	27	—	3s. 7½d.	—
1889	27½	—	3s. 4½d.	—
1892	24	—	3s. 10½d.	—

The fact is obvious from the comparison that spinners have not reduced their prices in the same ratio as those for raw material. Of late years they have been assisted in this by the circumstance that the spindle capacity of British and Irish mills has not kept pace with the growth of power-loom capacity. The spindles seem now to be overtaking the looms, and if the tendency is continued the result will be to lower quotations of yarns. Port Phillip, lambs', and fleece wools, quoted 12d. to 22d. in 1845-50, were at the beginning of the year 17½d. The

figures relating to the Manchester staple we produce in full:—

tyranny they are exercising against it. It will be observed that there has within the past year

DATES.	RAW COTTON.			YARN.		COTTON CLOTHS.	
	Upland Middling.	Upland Middling Fair.	Surat. Dholl. Fair.	Perman-luco Fair.	Mule No. 40, Fair, and Quality.	Printers' 26 in. 66 Reel, 29 Yards, 4 lb. 2 oz.	Old-end Shirts, 40 in. 66 Reel, 37 1/2 yds, 8 lb. 12 oz.
	per lb. d.	per lb. d.	per lb. d.	per lb. d.	d.	s. d.	s. d.
1865-50	5 1/4	5 1/4	5 1/4	8 1/4	9 1/4	4 7 1/2	8 10
1869-1 January	11	11 1/2	8 1/2	11 1/2	14 1/2	5 10 1/2	11 10
1873-1 January	10	10 1/2	7 1/4	10 1/2	15	5 9	11 3
1877-1 January	6 3/4	—	5 3/4	6 1/2-16	11 1/2	5 4 1/2	9 10 1/2
1879-1 January	5 3/4	—	4	5 3/4	8 1/2	3 10 1/2	8 0
1880-1 January	5 3/4	7 1/4	5 1/2	7 1/4	10 1/2	4 0	8 0
1881-1 January	6 1/4	7	5 1/2	7 1-16	10 1/2	4 7 1/2	9 0
1882-1 January	6 1/2	7	4 3/4	6 1/2-16	10 1/2	4 7 1/2	9 0
1883-1 January	5 3/4	6 1/2	3 3/4	6 1/2	9 1/4	4 4	7 10 1/2
1884-1 January	6	6 1/2	4	6 1/2	9 1/2	4 0	7 9
1885-1 January	6	6 5-16	4 1/4	6 1/2	9 1/2	4 0	7 9
1886-1 January	4 15-16	5 3-16	3 15-16	5 3/4	8 1/2	3 10 1/2	7 4 1/2
1887-1 January	5 1/4	5 3/4	3 9-16	5 9-16	8 3/4	4 1 1/2	7 4
1888-1 January	5 1/4	5 1/2	3 13-16	5 13-16	8 1/4	4 0	7 9
1889-1 January	5 3/4	5 3/4	4 5-16	4 5-16	9 1/2	4 1 1/2	7 9
1890-1 January	6 1/4	5 11-16	4 5-16	6 3-16	9	4 1 1/2	8 1 1/2
1891-1 January	5 1/2	5 11-16	4 5-16	6 3-16	9	4 1 1/2	8 1 1/2
1892-1 January	6 7-16	6 9-16	4 3-16	6 5-16	9 1/4	4 1 1/2	8 3
1891-1 January	5 3-16	5 7-16	3 7-16	5 3-16	9 1/2	4 0	8 1 1/2
1891-1 February	5 1-16	5 1-16	3 1-16	5 1-16	9 1/2	4 0	8 1 1/2
1891-1 March	4 1/2	5 3-16	3 1/2	5 1-16	9 1/2	4 0	8 1 1/2
1891-1 April	4 1/2	5 3-16	3 1/2	5 1-16	9 1/2	4 0	8 1 1/2
1891-1 May	4 1/2	5 3-16	3 1/2	5 1-16	9 1/2	4 0	8 1 1/2
1891-1 June	4 1/2	5 3-16	3 1/2	5 1-16	9 1/2	4 0	8 1 1/2
1891-1 July	4 1/2	5 3-16	3 1/2	5 1-16	9 1/2	4 0	8 1 1/2
1891-1 August	4 1/2	5 3-16	3 1/2	5 1-16	9 1/2	4 0	8 1 1/2
1891-1 September	4 1/2	5 3-16	3 1/2	5 1-16	9 1/2	4 0	8 1 1/2
1891-1 October	4 1/2	5 3-16	3 1/2	5 1-16	9 1/2	4 0	8 1 1/2
1891-1 November	4 1/2	5 3-16	3 1/2	5 1-16	9 1/2	4 0	8 1 1/2
1891-1 December	4 1/2	5 3-16	3 1/2	5 1-16	9 1/2	4 0	8 1 1/2
1892-1 January	4 1/2	5 3-16	3 1/2	5 1-16	9 1/2	4 0	8 1 1/2

This table conveys its own lessons, which do not need elucidation from us. It shows clearly the slow but sure decline in prices of yarns and cloth for many years past, and the figures will no doubt be appreciated by students of the trade.

THE YARN TRADE OF INDIA WITH CHINA AND JAPAN.

The story of the displacement of the Lancashire yarn trade with China and Japan in the lower numbers of yarns is one that does not need re-telling. It is simply a fact that where millions of pounds weight of this kind of yarn were formerly sent from this country to India, China, and Japan, not a bundle now goes, except of some special high-class quality made from high qualities of cotton, and "spun down" to the required numbers. Our trade has been totally captured in this class of yarn by the Bombay mills, which not only supply the requirements of India, but also those of the other countries named above. To shew the progress made we need only adduce the figures of the Bombay exports of Indian yarn to China, in which there has been a steady increase. We give the figures of each year from 1887:—

	To China (bales of 400 lb. each).	To Japan (bales of 400 lb. each).	Total bales.
1877	28,516	142	28,658
1878	45,933	1,745	47,678
1879	45,530	4,842	50,372
1880	63,104	4,527	67,631
1881	61,783	7,378	69,161
1882	81,434	9,854	91,288
1883	94,982	17,421	112,403
1884	127,318	13,846	141,164
1885	154,517	19,020	173,537
1886	199,407	20,543	219,950
1887	208,158	39,730	247,888
1888	234,071	52,097	286,168
1889	254,697	62,220	316,917
1890	325,060	37,722	362,782
1891	365,038	10,939	375,977

It must be borne in mind that these figures represent the displacement of our trade with China and Japan; there is nothing in them to shew the extent to which it has suffered in India: that is far larger than in both of these cases combined. And it ought to be remembered by Lancashire workpeople that a great amount of the capital invested in these mills is English capital, which, tired of the harassing conditions in which they have compelled it to work, has sought "fresh woods and pastures new," an example that will be followed by much more unless they moderate, and very greatly too, the

or two been a great falling-off in the exports to Japan. This has arisen, not from our regaining the trade, but from the commencement of numerous cotton mills in that country, which of course are beating the Bombay mills just as the former have beaten us. If they can do that, how much room will there be left for the productions of Lancashire in a short time, harassed as it is by the ignorant folly of the cotton operatives and their leaders? Shut out from Europe and America and our own colonies by hostile tariffs, and beaten out of India, China, and Japan by successful competition, where has the trade of Lancashire to look for an outlet for its productions, upon the finding of which their occupation and welfare depend? There is only Africa; but even into the Dark Continent, which must for many years be of only comparatively small value, Bombay has secured through Zanzibar a better entrance than we have. We may add to that, owing to the present low prices of cotton, large purchases of American have been made by the Bombay mills and shipments made. This is the beginning of a trade that is not likely to terminate very soon.

INSURANCE OF LACE AND HOSIERY FACTORIES.

The Policy-Holder hears that the normal rates for lace and hosiery factories have been doubled, and additional extras not enforced by the old tariff are now required under certain conditions. It may therefore be fairly assumed that the increase in rating will be from 120 to 140%, and, according to our contemporary, it remains to be seen whether, in view of the number of serious fires which have taken place in these risks during the last few years, a profit will be realised by the offices even with this advanced rating. Another important feature is the application of the 75% average clause to all insurances on machinery and stock. In respect of the warehouses of both classes, where the business has not been so unremunerative as in the factories, certain changes of rating also prevail, but they are not of any material nature.

THE balance-sheet of Brunner, Mond and Co., Limited, the great alkali manufacturers, shews the profits for the half year to be £242,000, out of which a dividend on ordinary capital of 50 per cent. is recommended. £50,000 is carried to reserve, and £36,000 carried forward. Last year we made a comparison between the profits of this firm and those of about 100 of the Oldham Spinning Companies, much to the disadvantage of the latter. The comparison then made loses none of its force.

THE STRIKE AT WOODNOOK, ACCRINGTON.

SCANDALOUS ABUSE OF THE OPERATIVES' CONFIDENCE BY TRADES-UNION OFFICIALS.

In our issue of January 30th we had a plain statement, almost free from any comment of our own, of the origin and circumstances attending the strike at the mills of the Accrington Co-operative Spinning Co., Limited. Three weeks after, that is yesterday week, Mr. James Mawdsley, the general secretary of the Operative Spinners' Association, the chief engineer of their "striking" department, and the principal director of this particular "striking" case, appears in the *Cotton Factory Times* with his defence. It is an interesting document; and, for the edification alike of the spinning trade, the operatives of Woodnook Mills, and those in the trade generally, we propose to subject it to a little examination. Its writer asserts that it is a "correct version of the matter" which he affirms ours was not, "but mostly otherwise." During the earlier stages of this dispute Mr. Mawdsley and his little clique of local marionettes, who are always ready to dance when he pulls the strings, were significantly silent about their proceedings, because they knew well that if these became known prematurely their little plot, notwithstanding the iron hand with which they rule their constituents, would be in danger of collapsing, because of its unsubstantial foundations. He explains this silence on the ground "that details of these matters are rarely of public interest, and therefore he did not give them, being confirmed in this course by what he thought was the non-appearance of any statement from the employers' side." It was not desirable as long as the faintest chance existed of the tyrannical proceedings of the Union being abandoned, or of any arrangement being made, that any public statement of the matter should be made. On the other hand we hold that a knowledge of such matters is of great public interest and importance in every town in which such proceedings occur, as causeless and foolish strikes like this deprive the operatives of their means of purchasing the necessities of life to a very great extent, exhaust their private resources, throw them into debt with the tradespeople—many of whom never get repaid, and inflict upon every town for the time being a plague of insolent beggars, who wait upon the tradespeople demanding contributions to support the strike, plainly intimating that if they refuse they will be boycotted, and ruined in their business. Surely when matters of this kind are impending, they "are of public interest." The operatives ceased working at these mills on Wednesday, January 27th, and our article appeared on the 30th. There was, therefore, no time lost in letting the public know the facts of the case. But Mr. Mawdsley says in the *Cotton Factory Times*, of Friday, February 19th—that is twenty days after our article appeared—"We now learn that the employers got their version of the business inserted in *The Textile Mercury*; but we question if anybody would have known of this had not the *Accrington Times* copied it out." We have every confidence in affirming that there was at least one person who knew of it very early, and that was Mr. James Mawdsley himself. On the Friday following, an inspired paraphrase appeared in the operatives' organ, giving an intimation that our statement would be replied to. This egg having been sat upon for the orthodox term for incubation the precious chick has come forth, and we propose to examine whether it is of a good strain and correct in its points. But previous to doing so we will just give our readers an insight into the manner in which trades-unionists endeavour

to gag the press of the country by suggesting boycotting. We quote the sentences following the one extracted above:—

How is it that local papers are so fond of copying out employers' statements from employers' papers, when by sending out a reporter they could in a few minutes ascertain the facts from both sides for themselves, we need not stop to enquire? It is, however, a fact which the operatives will do well to notice.

Leaving the muddled grammar of the first sentence without comment, we may simply observe that such suggestions as that contained in the second one are not uncommon, and unfortunately, judging from the manner in which the local press, and even the more pretentious "dailies," ignore every opportunity of presenting the employers' sides of questions in dispute, and the way in which they seize every chance of giving publicity to the rubbish of trades-union and socialistic orators, it would seem that the suggestions are effective in securing the end they were made to obtain.

We will now follow Mr. Mawdsley through his "correct version of the matter," and see wherein it differs from our own. Says Mr. Mawdsley:—

Nearly two months before the strike took place complaints in respect to the spinning were received from the men employed at Woodnook. Mr. Mawdsley visited the place, and after going through with the manager, concluded that the complaints were warranted in the new mill, but not in the old one. The manager was asked to improve these, and told that it was not compensation, but fair conditions that were wanted, and a couple of weeks was given to get matters righted.

The only difference between this statement and our own is that Mr. Mawdsley's is studiously vague, whereas ours is clear and precise. He neither admits nor denies that there was great difficulty to get him there, and his implication that the firm was indifferent to the men's complaint is absolutely groundless, as they did not admit the justice of the complaints, and all the time were awaiting his convenience for a joint inspection by himself and Mr. Watson, the employers' secretary. Let the reader compare our statement with the above:—

A few weeks ago the spinners complained of bad spinning. The firm put the complaint before the Employers' Association, and a meeting was arranged between Mr. Joseph Watson and Mr. Mawdsley, the secretaries of the Employers' and Operatives' Associations respectively. This meeting was twice put off by Mr. Mawdsley, who at last came alone and went through the old mill with Mr. Kippax, the manager of the company. After a close investigation, taking to draws of the mule sides of each minder, he freely admitted that they had nothing to complain of, and would not be supported by the Association.

It will be observed that, so far as there is any difference, it is entirely one of suppression by Mr. Mawdsley. We next said:—

Mr. Mawdsley subsequently called again, and went over the new mill in the dusk, just before lighting up—a visit that was evidently timed, as it is then the most difficult moment of the day for the minders to see their work. He said the work was bad, against which the manager protested, affirming that that was not a proper time in which to take the test. Mr. Mawdsley, however, went down to the office and ordered the clerk, Mr. Oldham, to add 5 per cent. to the wages of the week for the preceding, the current week, and two weeks forward, and if this was not done the operatives would be brought out. Mr. Oldham, resenting this dictation, told Mr. Mawdsley that he had better take the mills over for the Operatives' Association and work them in their interests alone, and if, after paying such wages to themselves as they liked, there was anything left they might kindly hand it over to the shareholders. Mr. Mawdsley replied that the allowance must be paid as he directed.

Let our readers compare this statement with the advice of Mr. Mawdsley, and we would ask the operatives to do the same. Mr. Mawdsley did not "ask," he "ordered," as we stated, and neither in his language nor bearing was there the slightest trace of the moderation in which he has couched his present statements. No such thing as a couple of weeks was given the management to get matters right. Further

following Mr. Mawdsley's statement, we find he next says:—

At the end of that time complaints were again made to the effect that no improvement had taken place. Another week was allowed to elapse, making three weeks, when the mills were again visited, with the same result as before. The manager was therefore told that five per cent. advance would be expected that week-end for the new mill.

The material differences are again caused by suppressions on the part of Mr. Mawdsley. He continues:—

This not being paid, another visit was arranged with Mr. Watson, of Blackburn, who was accompanied by Mr. Whalley, the operatives' local secretary, Mr. Mawdsley being unavoidably absent. Mr. Watson said the work was good, so the following week Mr. Mawdsley again went through part of the new mill in the afternoon. Remaining all night in the district, he personally went to Mr. Watson's office the following morning and asked for his company to go and look at the work. Mr. Watson, however, had some private work to look after, and could not leave that to attend to the employers' business. Mr. Mawdsley accordingly went to the mill himself, with exactly the same result as before.

Mr. Mawdsley endeavours to convey to his constituents how very attentive he is to his duties in looking after their interests, and how great is his difficulty in getting the employers and their representatives to meet him and to attend to their complaints. We have information in our possession and copies of correspondence before us, the originals of which have been in our possession, and from which we have caused the copies to be made, that put an altogether different complexion upon Mr. Mawdsley's statements and the facts. We should not have cared to refer to this had it not been for the purely gratuitous and uncalculated-for imputation of Mr. Mawdsley's statement that he called upon Mr. Watson, and asked for his company to the mill, but that "Mr. Watson, however, had some private work to look after, and could not leave that to attend to the employers' business." Mr. Watson was called upon at the time arranged for an arbitration meeting on another trade dispute in Blackburn, the parties to which were then arriving at his offices, and were seen entering by Mr. Mawdsley himself. Of this fact he was also distinctly and clearly informed by Mr. Watson. Such an inaccurate statement, therefore, comes with bad grace from a man having charge of such important interests as those the operatives have put into his hands, and who in discharge of his duties failed to keep every appointment he made upon the matter. Surely it would be well for his constituents to ask the character of the engagements that prevented him from keeping his appointments.

The following correspondence, read in connection with the other matter that has transpired, will shew the public where the blame for this particular dispute really ought to be placed, and we venture to assert that it is simply typical of nearly every one that takes place:—

[Copy of letter sent to Mr. James Mawdsley, secretary of the Operative Spinners' Association, Manchester.]

Blackburn Master Cotton Spinners' and Manufacturers' Association, Blackburn, January 20th.

DEAR SIR,—I am very much surprised to hear today from the Accrington Cotton Spinning Company, Limited, Woodnook, that all their spinners and card-room hands have given a seven days' notice to leave work. You wrote me January 5th, saying there was trouble over the spinning at Woodnook New Mill, and saying you wished me to meet you there on Thursday at 10.30 sharp. I went to the mill and I met the Accrington secretary, who told me you had missed your train, and shewed me a telegram asking us to go through the mill, which we did, and agreed it was not spinning badly. We examined the wage book and found the operatives were earning good money. The same day I wrote you to this effect and appointed a time and place to meet you in Manchester. Next day, I went to the appointed place with Mr. Kippax, the manager, and waited for you three-quarters of an hour; you did not turn up. The next day I received a letter from you saying that Mr. Whalley, your secretary at Accrington, had not written you re the dispute and you had taken my report as correct, and had therefore not

kept the appointment. When I returned from Manchester the day you should have met me, and before receiving the letter named above, I wrote you offering to meet you on the Tuesday in Manchester, either at 12 noon or at 3.15 p.m., naming two different places to meet at, and asking you to reply per return so that I might arrange for Mr. Kippax to go with me. To this letter I have had no reply. Neither did I hear anything further from you until you called here last Wednesday morning, just when I had some other masters here trying to settle another dispute; and you saw them. You wanted me to go with you then to the mill, which I, of course, being engaged just then, could not do, and since then I have heard nothing further from you. Then to-day I hear you have ordered the notices to be given in. Is this fair and reasonable, and is it the way to keep up that good feeling which has existed between the two societies, to say nothing of its being a violation of the agreement between the two associations, that notices shall not be allowed to be given in by either side until every effort to effect a settlement has been tried and failed? You know that I am always anxious to avoid notices being given in, as they cause strained feelings on both sides, and you must concur with me that the old agreement has always worked well and we have never yet had a failure; when the two secretaries could not agree, we have called in two members of each association and they have always settled the matter.

In the present case I have felt it my duty to call together my committee to lay the facts before them.

I would suggest as a means of a settlement, and to preserve the good feeling between the two Associations, that you withdraw the notices, and arrange that two members of each Association, together with the two secretaries, meet at the mill, on Monday or Wednesday next, to go into the whole dispute, and see if the matter can't be settled. It will never do for the public to know the facts as they exist. To save time I have forwarded a copy of this letter to Mr. Whalley, the secretary at Accrington, and I ask you for an early reply.

(Signed), JOSEPH WATSON, Secretary.

[Copy of letter from the Amalgamated Association of Operative Cotton Spinners]

Central Offices, 3, Blossom-st., Gt. Ancoats-st., Manchester, Jan. 23rd.

To Joseph Watson, Esq.,

DEAR SIR,—On account of absence from town I have only just seen yours of 20th inst. I may say that I do not see that there is anything to trouble about in connection with the Woodnook Mills. I first saw the work at the new mill and it was bad. I asked Mr. Kippax, who admitted personally to me that it was worse than he thought, to improve it in two or three weeks. This he failed to do, according to the men's statements. Then you and Mr. Whalley saw it and you said it was good, and Mr. Whalley sent no report at all so I could of course do nothing else than accept yours. As Mr. Whalley, however, reported that you had been good enough to say that my absence on my last visit was a "get out," I determined to go again. I called at your office, but found you were unable to come with me, so went alone. I found the work in both the new mill and the old one worse than before. The old mill was not, however, doing bad enough to require any special interference, so I only asked for an advance for the new mules. The case, therefore, stands thus. I and you have seen the work. You say it is good, I say it is bad and want compensation. There is nothing further to go to the mill about and so far as I am concerned there will be no withdrawal of notices. The men are welcome to do so if they choose. If you think anything can be done with an interview, I shall be glad to see you on Tuesday, at Manchester. In that case, drop me a line stating time and place.—Yours,
JAS. MAWDSLEY.

P.S.—Have re-opened this letter to say that one o'clock is the only time I can see you on Tuesday, unless you fix a time after tea. You can, of course, fix any time you like, in which case I will arrange for somebody to meet you.—J. M.

[Copy of letter sent to Mr. James Mawdsley, secretary of the Operative Spinners' Association, Manchester.]
Blackburn Master Cotton Spinners' and Manufacturers' Association, July 25, 1892.

DEAR SIR,—Your letter of the 23rd received to-day, and I regret you do not see your way to fall in with my suggestion in mine of the 20th, as a means of settlement, that a deputation from the two associations meet at the mill, and go into the whole dispute, with power to settle.

It just means that the two associations will have to pay a good amount of money from their funds and have then to do what I suggest, after, in addition to the money being lost, possibly things being said and deeds done that would have been better not said or done. As you say "Mr. Whalley reported to you that I had been good enough to say that your absence in the last visit was a get-out," I say without any reservation that it is not true. I never even thought

of it, much less made use of the expression imputed to me. The facts of the case will be laid before a committee of the North and North-East Lancashire Masters' Association to-morrow, at the Mitre Hotel, at three p.m. If you would like to attend, or anyone representing you, I will see that you have the opportunity of having an interview.

(Signed) JOSEPH WATSON, Secretary.

These letters are plain enough, and might be left to speak for themselves. There are, however, one or two points to which we would briefly draw attention. Mr. Kippax, we believe, never made any such admission about the cotton working badly, as Mr. Mawdsley states. Mr. Mawdsley could not attend Accrington because it was snowing, and his subordinate, Mr. Whalley, the Accrington Operative Spinners' secretary, went through the mill as his substitute, and agreed with Mr. Watson that the work was not spinning badly, yet made no report on the matter of his agreement. Strange conduct this, of a secretary, whether acting on his own account or as the deputy of another! But stranger still that he could proceed to make a report that Mr. Watson had said that Mr. Mawdsley had stayed away as a "get-out" of the difficulty, which Mr. Watson emphatically denies. But even if the latter held and expressed that opinion, of what importance was it, compared to the fact of their having agreed that the work was not bad, and which he failed to report to Mr. Mawdsley? But it is not only at Accrington that Mr. Mawdsley fails to "turn up"; he equally dislikes toosing the mark in Manchester, a sentiment that can only be attributed to a consciousness that he has a bad case which he cannot defend, and therefore evades all meetings. These are facts that the operatives of Lancashire and those involved in this dispute should carefully examine and think over.

It being impossible to get Mr. Mawdsley up to the scratch, the employers deputed two of their members to make an independent visit to the mills and report thereon. The gentlemen selected were leading spinners in Blackburn and Burnley. They made a careful examination, and concluded that there was not the slightest justification for any of the complaints made. Mr. Mawdsley subsequently, as he says:

Met the employers' committee, and they not only declined to sanction compensation in this case, but refused to admit that it was warranted. The men are now on strike, the incident being only one link in a chain of events which will in time, it is hoped, bring the employers to reason.

In their conclusion, as we have abundantly shewn, the employers were thoroughly justified. The public will be able to judge for themselves where the departure from reason occurs. Continuing, he says:

Perhaps it is only fair to mention that the employers wanted Mr. Mawdsley to go through the mill again with two of their body, exclusive of Mr. Watson, which he (Mr. Mawdsley) was quite agreeable to do, so far as settling what should be done in the future was concerned only. As the employers declined this offer, he on his part declined again to re-open the past (the men were claiming extra pay for less than half the time the work was in), with the result stated.

We have now followed Mr. Mawdsley through his "correct version," and our readers will please judge for themselves whether our or his statement is the most "full, true, and particular account." They will have no difficulty in concluding. In the closing paragraph given here he makes a modest demand that all his statements shall be accepted and his demands be conceded up to this point, and then he will condescend to accompany the employers' deputation; but they must subject Mr. Watson to the indignity of excluding him, to which, of course, they declined to submit. Mr. Mawdsley was faced with the fact that his was the only statement that the work was bad: the manager and secretary of the mill, Mr. Watson (the employers' secretary), Mr. Whalley (the Accrington operatives' secretary), and the two gentlemen deputed by the employers, all concurring that the work was not bad. To this Mr. Mawdsley replied that he did not care a jot for anybody's report:

he had reported it bad, and he was not going to have his report set aside. It was then pointed out to him that such arbitrary and unreasonable conduct could not be submitted to, and would lead to a severe fight. To this he retorted: "Well, we'll fight; you cannot; you've got no money, and we have."

We have been led to deal with this matter at this length in order that the public interested in this and kindred matters, and especially those directly affected by it, may not be led astray by Mr. James Mawdsley's ludicrous burlesque of the facts; and in the hope that the operatives will be wise enough to see that only the greatest injury can accrue to their interest by the same being continued in the keeping of such men as now enjoy their confidence.

Designing.

NEW DESIGNS.

THE DISTRIBUTION OF SPOT FIGURES.

A correspondent desires information respecting the above, and although we have in the past discussed most of the schemes at some length yet the subject is such an extensive and important one that a brief *resumé* may prove very serviceable.

The simplest method of arranging a spot in a design is to place one such in the repeat of the pattern. Such an arrangement, however, is rarely resorted to, since, unless the spots be very far apart, the treatment gives prominence to horizontal and vertical lines. Again, should the structure of the fabric be involved in the production of the spot, unevenness of tension in the warp will be fully developed, and cockled pieces will result.

The simplest and at the same time most effective method to use is that demonstrated in Designs 11 and 12, usually termed the "drop" system. In Design 11, a large surface of ground appears between each figure, this being the case when only small figures, possessing as a rule very little detail, are used. Design 12 is most useful as indicating how a larger figure with more detail in it may be made to "cover" well; in fact this Design 12 is hardly so much an example of spot distribution as of a scheme for figure arrangement.

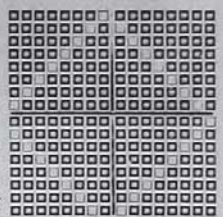
The next step is the utilization of the 4-end sateen as instanced in Design 13. Here little insight is necessary to perceive that the arrangement is only a slight modification of the previous one, being simply a figure arranged in reversed drop order.

On coming to the 5-end sateen a marked difference is observable. Two methods of constructing this are possible:—(a) Firstly, divide the page of design paper at disposal into five equal parts, both warp and weft way; secondly, decide the sateen positions by counting these parts (either 3 or 2); and thirdly, insert a spot upon each ascertained sateen position, taking care that each spot is inserted in relatively the same manner. (b) The other method is that illustrated by diagram, in which the sateen positions are ascertained connected by lines, and a figure is finally placed in the centre of each square thus formed. The 7, 8, 9, etc., sateen distribution may be effected in a similar manner.

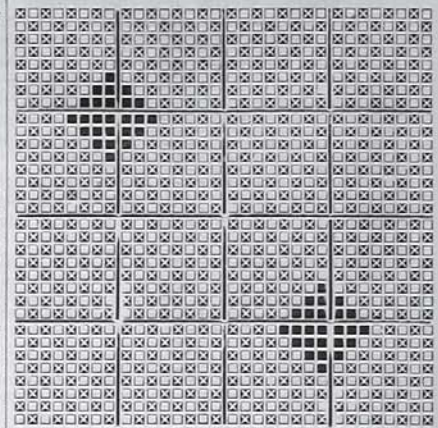
Having thus dismissed the simpler arrangements, attention may be directed to the more intricate ones. Take, for example, the arrangement of a reversed figure. Here is ample room to go wrong, but care will render the matter extremely simple. The designer must proceed in precisely the same manner as indicated above till he comes to the insertion of the spot or figure. Now let him carefully ascertain the centre of the figure, and in whatever position he places it, whether leaning to the right or left, let the centre dot be always on relatively the same square in the sateen position. If this be carried out it is impossible to get wrong, but should care not be taken, even in simply reversing a figure, a defective pattern will result.

Another point needing attention is that, should the 5-end sateen be adopted as the basis for a reversed figure, it will have to be repeated twice in each direction, *i.e.*, four times altogether, since, if only five figures are present in the

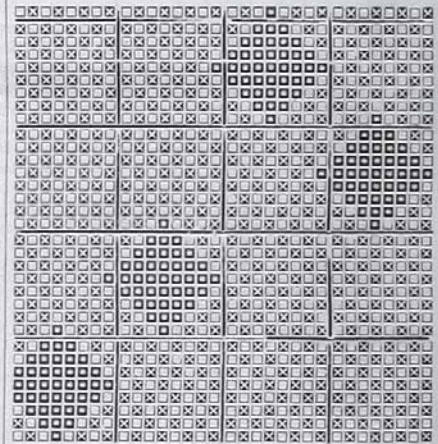
repeat, an equal number will not be leaning in each direction. The same objection applies to the 7-end sateen, so that, all things considered, the 8-end sateen will prove most serviceable for reversed figures, giving only eight units to the repeat as against ten and fourteen in the case of the 5 and 7-end sateens respectively.



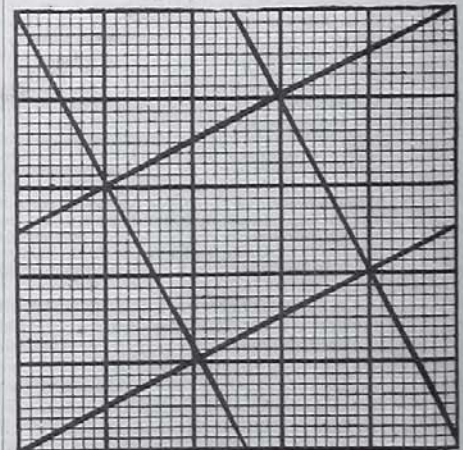
DESIGN 13.



DESIGN 11.



DESIGN 12.



FIVE-END SATEEN.

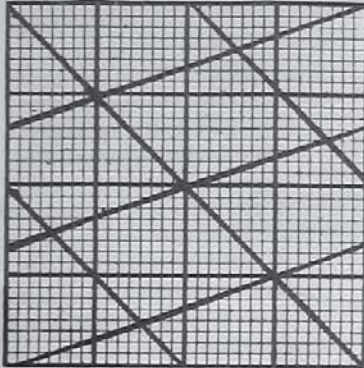
Other conditions than any dealt with above may possibly occur: such, for example, as arranging a given figure with a definite quantity of ground between it and the succeeding figure; but with the exercise of that somewhat rare faculty "common-sense," the above instructions will prove ample. It may be as well to state, however, that the above method may be slightly modified under certain conditions, such as in the insertion of plain ground, when the moving of a figure, one up or down, may make the plain cut; in fact the designer should always be on

the alert to seize upon such opportunities, for it must not be forgotten that a design is not free from defect till developed in the *best possible manner*.

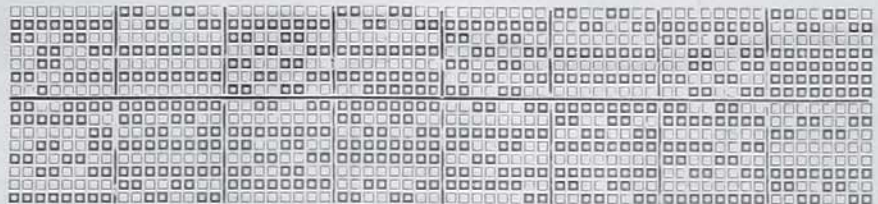
ORIGINAL DESIGN FOR REVERSIBLE VESTING FABRICS.

It seems that cotton fabrics suitable as vestings for general wear are becoming more popular, either for home or export markets; it is merely a revival of a manufacture in this branch of textile cloths of many long years ago. We venture, therefore, to submit an original design, which will produce a reversible vesting cloth, that is, of two differently coloured faces. A dobby will be required to work this design, on account of the round being 64 picks for a repeat, 15 shafts, 96-end draft. Of course the draft may be made more simple by extending the number of shafts. We have reduced the design to the lowest possible number: 20 shafts

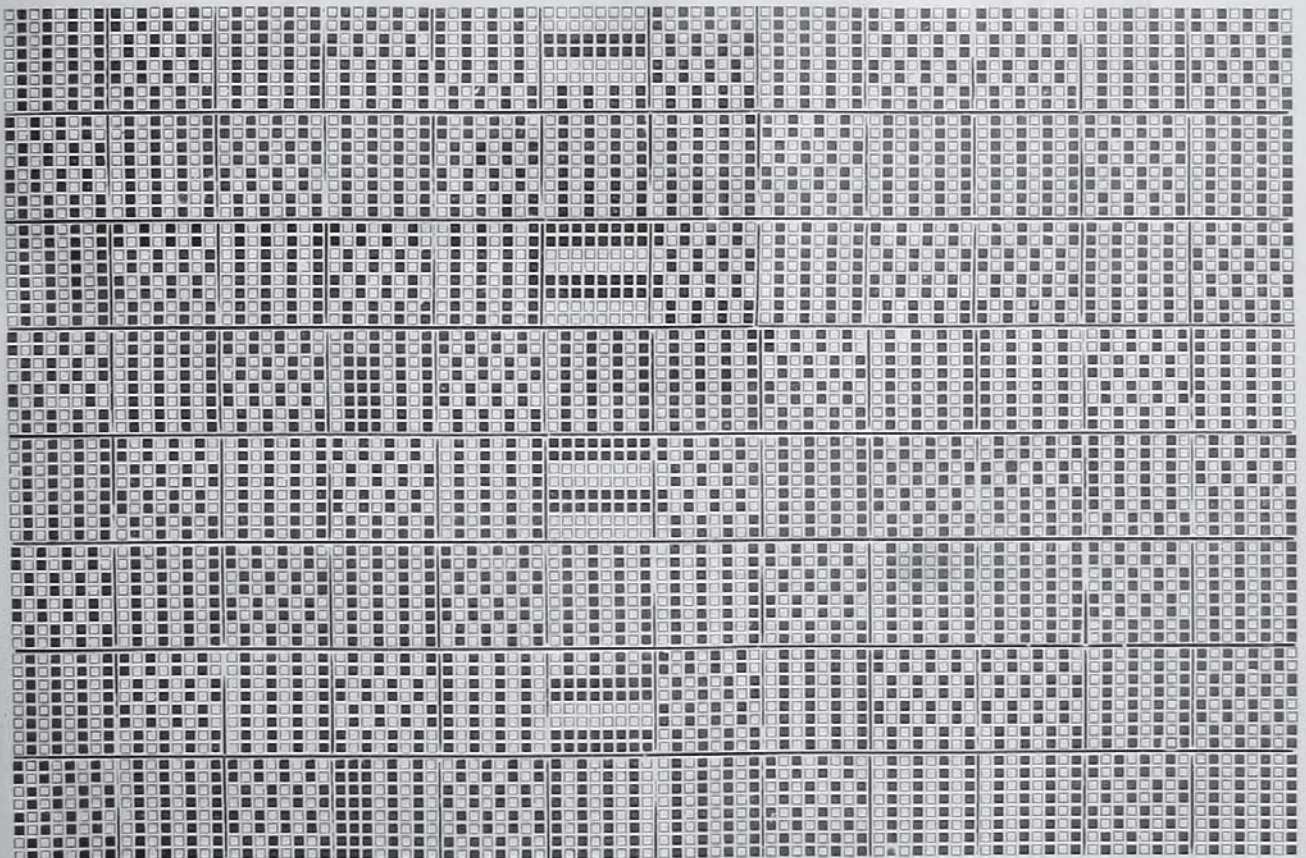
would make a less complex draft. There is a possibility of making the fabric in so many weights, either heavy or light, that it would be out of place to give a fixed quantity of materials for its production. A good cloth may, however, be obtained by using, for warp, 60's two fold, 120 ends per inch, or 30 dents per inch, four in a dent; weft, 90 picks per inch of 20's slack-spun cop. Warp pattern, end and end all through of white, and a contrast, such as white and blue, or any colour, shade, tint, and hue, that will harmonize with each other, the weft at all times being as near as possible the same as the lightest tint in the warp. To make this more plain we give patterns for warp: 1 canary, 1 deep purple; weft all canary; if warp 1 white, 1 brown, then the weft would be all white; again, warp 1 light-fawn, 1 light-blue, the weft would be all light-fawn. One face of the cloth would be light ground, dark spots; the reverse, dark-ground, light spots.



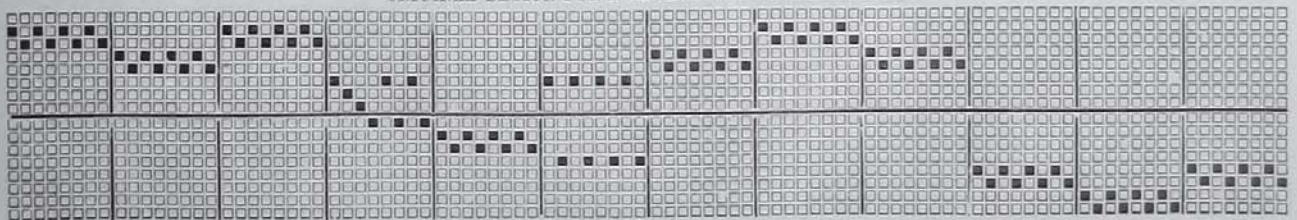
EIGHT-END SATEEN.



PEGGING PLAN.



ORIGINAL DESIGN FOR A REVERSIBLE VESTING FABRIC.



DRAFT.

Machinery and Appliances.

PATENT QUICK-TRAVERSE DRUM WINDING FRAME.

MAKERS: MESSRS. DOBSON AND BARLOW,
LIMITED, BOLTON.

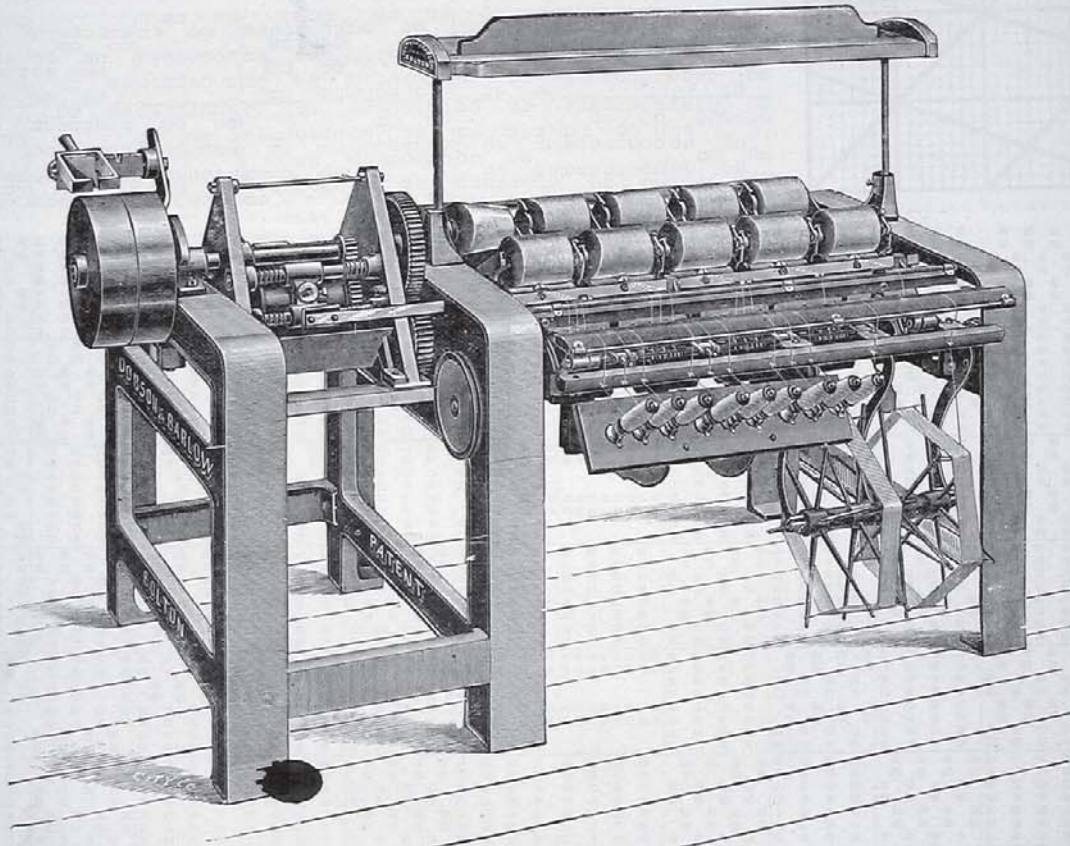
In doubling-winding the importance of running the threads upon the bobbin at a uniform tension and making a bobbin of even surface is well known, and requires no special elucidation. Suffice it, therefore, to say that a high quality in the ultimate is impossible unless the work at this preliminary stage be properly performed. The attainment of this result greatly depends upon the manufacturer securing for

desired it is fitted with a brake motion to each delivery bobbin to prevent over-running and the slack which without such appliance is liable to result. The winding bobbins are not required to be lifted from their bearings when broken threads are being pieced up. When the piecing is made, one action removes the break and simultaneously starts the bobbins. Bobbins can be made on this machine of any size, from the smallest required up to 6 in. lift by 9 in. diameter, by simply changing the cam, and 5 lb. of yarn can be put on a paper tube $\frac{1}{8}$ in. diameter, weighing only 4½ dwts. This shows the great facility that the machine offers for yarn winding when the production is intended to be consumed in distant places. The productive capacity of the machine is very great, as is shewn by the fact that it will give 16 lb. of 50's twofold per drum per week of 54 hours.

better tension for doubling or twisting, and ensuring improved working in warping mills. The bobbins are made with perfect selvages. The machine in its working requires less attention than most others, and produces only the minimum of waste.

It is needless to say anything of the quality of the material used in, and the high finish of the machine, as the standing of the firm from whose establishment it issues is a sufficient guarantee in these respects. The firm will be pleased to give any other information required.

A NEW RIBBON LOOM.—The *Memorial de la Loire* describes a new loom for ribbons, invented by MM. Camille Brun and Fils, of St. Etienne. It acts automatically, with no or very little attention on the part of the worker. If there is a fault, or if a thread of the warp is broken, or the



PATENT QUICK-TRAVERSE DRUM WINDING FRAME.—MESSRS. DOBSON AND BARLOW, LTD., BOLTON.

the performance of his work a machine of the best type and construction.

We have pleasure in placing before our readers an illustration of a patent quick-traverse winding machine, of great capacity in every requisite quality for yielding the most satisfactory results. It is made by the eminent Bolton firm of machinists, Messrs. Dobson and Barlow, Limited. Our illustration affords everything necessary in the way of description. The machine winds any number of threads from one to six, and, being fitted with an instantaneously-acting stopping motion, all-over running is prevented. The drag upon the threads is perfectly uniform, which effectually precludes corkscrewing in the after process of twisting. No twisting, over-riding, or other mingling of the threads occurs during the winding. As shewn in the illustration, this machine will wind from cops, any kind of bobbins, or rices. When

It will make parallel or cone-shaped bobbins, and with the firm's patent tapering motion will also make bobbins with tapered ends, so desirable when winding from hard-twisted yarn or polished thread. It can also be adapted for slow-traverse work when winding upon flanged bobbins. It will take any counts of yarn from 1 to 100's without any change in the size of the drop needles. The needles can be changed for any number of threads or kind of yarn without the displacement of any other part.

The makers claim that it is a highly economical machine for use in winding yarn for export. Great economy is also obtained in the cost of bobbins, cost of creeling, and expenditure for labour. There is no threading of guides, nor stoppages for doffing; there are less breakages of yarn, and consequently fewer ordinary knots and no bunch knots. Less strain is put upon yarn when winding and unwinding, thus giving

weft in the shuttle is exhausted, the loom stops of itself, and thus attracts the attention of the worker, who is able to attend to several looms at the same time. The inventors claim that their system can be applied to the tambour and the Jacquard, as well as to any other loom, and that they have solved the problem of faultless and cheap production. Experiments continued for several months are said to have proved that it is possible with one of the new looms and one worker of only slight experience to produce as much as with six ordinary looms and six experienced workers, which means a saving of 10 to 15 francs a day on 750 metres of ribbon. This represents on the ribbons at present woven, which are worth about 14 francs per 100 metres, a gain of 10 to 15% in the cost of production.

The erection of the new cotton spinning mill for the Mather-lane Cotton Spinning Company Leigh, is being pushed forward, and already considerable progress has been made.

Bleaching, Dyeing, Printing, etc.

INCREASING THE DYEING POWER OF DYEWOOD EXTRACTS.

All the indications hitherto given of a possible improvement of dyewood extracts, with the exception of the patented invention of M. Farlane and Clarkson, have been expressed with great reserve. One method consists in an oxidation of the dyewood extract with ammonia, and subsequent neutralisation with sulphuric acid. An addition of calcium acetate to the dye-bath produces, according to the author, V. Cochenhausen, a further increase of dyeing power. The very dilute solutions of extract treated in this manner actually dye the woollen fibre more intensely, while with vegetable fibre a difference is not observed. The shades obtained on the woollen fibre have, however, the disadvantage that the shade has become somewhat less fast to light, and that it loses just as much in intensity as it had gained before. For the extract manufacturer this improvement with ammonia is of no value, as it is not practicable on the large scale. The liquid colouring matters as they leave the extractors would have to be diluted to 7° Tw., or lower still if they should stand the treatment with ammonia without danger; and subsequently with sulphuric acid, after which the evaporation in the vacuum apparatus will have to take place. But in this, too, a separation of the finished extract at 53° Tw. may easily occur, not to speak of the great expense of evaporating.

The American method mentioned above, by which an oxidation of the hæmatoxylin with hæmatein is effected by chlorine, is really good; but applied on a large scale it also is accompanied by serious inconveniences, so that its practical application is scarcely to be expected. Lastly, there is the patented method with permanganates. Potassium permanganate was used for this purpose ten years ago, but the application was discontinued, because the dyewood extracts mixed with this salt are scarcely applicable in wool dyeing. Altogether, the colours obtained with such extracts have a very dull appearance.

Having reviewed the proposals for improvement already known, the author finds by his own experiments that all those extracts which are oxidised in the extraction, do not produce the same intense colours as extracts made with the precaution of avoiding such oxidation during the operation itself, and which are only subjected to it afterwards. As an example, the author mentions a dyewood extract obtained from a wood that had previously been oxidised for one day with silicate of potash. This extract produces less intense colours than another obtained from unprepared wood and only treated subsequently with oxidisable substances. An addition of such substances as chalk, borax, soda, etc., during the extraction of the wood will, therefore, have to be avoided, and an addition of a suitable substance will have to be made only at the finishing in the vacuum apparatus in such a manner that there will be no risk of over-oxidation or combustion. Glycerine proves to be an excellent substance for the purpose.

The author further tried the extraction of dyewood in the presence of salts, such as saltpetre, common salt, and a solution of bisulphite of soda at 76° Tw. The extraction was done by the so-called American method, at 22½ lb. pressure, with the application of ¼ part per thousand of saltpetre, as much common salt, and of ¼ part per thousand of bisulphite of the weight of the dye-wood. An increase in the yield of the extract could not be noticed by any of these experiments. The final dye tests on wool and cotton were apparently weaker than with one of a pure extract. But if a small quantity of some oxidisable substance was added to the dye-baths, and the cotton, mordanted with iron (or wool boiled with chrome and sulphuric acid), was brought into them, the relation of the colours was changed in a very

short time, the extracts treated with the salts mentioned producing far more intense colours, and the intensity increasing from common salt to saltpetre and bisulphite. Of all the oxidising substances employed the extract treated with the bi-sulphite produced the most intense colours.

The use of ordinary alkalis, such as borax, ammonia, silicate of soda, etc., although producing good results, is scarcely practicable: in the first place, because it would be very difficult to mix them with the extract without fear of a partial decomposition of the latter; and, again, these alkalis, if acting for some time, have an injurious effect, as the extract may be considerably weakened thereby.

It was not difficult to find convenient means of oxidation. In cotton printing, potassium chlorate has been employed for some time, and this substance also produced very good results in the author's experiments. The solution of potassium chlorate can be mixed easily with concentrated colour extracts without any decomposition taking place. In this manner dye-wood extracts were obtained, shewing in comparative trials a dyeing power greater by 10%. Of the other salts tried, none produced, even approximately, the same favourable results as sodium chlorate.

The author discovered, however, that the best means of changing hæmatoxylin into hæmatein, provided the dye-woods had been previously extracted with the help of deoxidising substances, was by potassium ferricyanide. This substance is an excellent agent for the oxidation of all vegetable colouring matters. The solutions of the different extracts, if mixed with small portions of this salt, produced a much more solid shade on textile fibres mordanted with alumina, chromium, or iron. A dye-wood extract treated previously with bisulphite, and afterwards with potassium ferricyanide, produced tones on stripe mordanted calico that distinguished themselves particularly by their intensity and beauty. This was, however, also the case with wool mordanted previously with bichromate of soda (1½%) and sulphuric acid, and finally dyed with this dye-wood extract. The black obtained shewed a very full, velvety, bluish-black shade, which, when compared with a sample dyed under the same conditions with pure extract, presented a difference of 15% in the dyeing power, i.e., 15% more of the pure extract has to be used to reach the intensity of the colour obtained on the sample dyed with dyewood extract and potassium ferricyanide. But even then the latter had the finer and purer shade. The method of preparing such extract is briefly as follows:—The dye-wood is employed dry, and cut across the grain, with the greatest possible avoidance of the production of many dust particles. For the extraction the author makes use of a battery of five copper extractors, four of which serve for direct extraction, and are, therefore, filled with wood, and emptied after the extraction has been repeated five times, and are again filled with wood; while the fifth apparatus remains filled with boiling water, and is under a certain pressure, which causes the transference of the liquors and the filling with fresh water in the other coppers. Every extraction lasts fifteen minutes, with a pressure of 22 lb. To the extractor, freshly filled with wood, the indicated quantity of common salt, saltpetre, or bisulphite is added in aqueous solution, and afterwards weak (0.8° Tw.) boiling wood liquor or boiling water is caused to enter. After the extraction is completed, the liquors are transferred into a trough, from which they are either immediately drawn up into the vacuum apparatus, or where they are allowed to stand for 24 hours for the purpose of settling. The application of the latter method requires very large plant (basins or tanks). From these tanks the colour liquors have to be conducted directly into the vacuum apparatus. (The evaporation of the extracts of 6.6° Tw., in open vessels with rotating paddles, whereby an oxidation of the colouring matter is produced from the beginning, must be absolutely avoided.) When the extract in the vacuum apparatus has reached the required strength (for instance, 42° Tw. hot for a 53° extract), the solution of the red prussiate is drawn up, and the vacuum

is removed. In this consists the whole method of manufacturing an improved extract of this kind. The quantitative addition of potassium ferricyanide is regulated according to the quality of the extract and the colouring matter. With redwood, fustic, and quercitron extracts also, much stronger extracts are obtained; and on wool and cotton mordanted with alum considered considerably better results are obtained. The author mentions, in addition, the logwood indigo blue and the so-called linnet blue of Runge, declared by the inventor to be the actual colouring principle of logwood. This is obtained by precipitating a decoction of logwood with acetate of alumina; the precipitate is treated with hydrochloric acid, when, if properly treated, it yields a gold-coloured paste of great beauty and colouring power. This idea may lead to the preparation of a hæmatein on an industrial scale at such a price as will enable it to be used on a large scale for dyeing purposes.—V. H. SOXHLETT, in *Chemiker Zeitung*.

METHODS OF WOOL DYEING: THEIR PRINCIPLES AND PRACTICE.—V.

(Concluded from page 132.)

2nd Method. *Stuffing and saddening*.—This method consists in first treating the wool with a solution of the dyestuff, and then with a solution of the mordant required to develop and fix the colour. This method is more particularly applicable to such dyestuffs as camwood, cutch, logwood, madder, fustic, etc., the colouring principles of which have some affinity for the wool fibre and will directly combine with it. It is not suitable for the application of the alizarine colours. The saddening may be and is commonly done in the same bath: that is, after the wool has been stuffed, it is lifted, the mordant, copperas, bluestone, bichrome, or alum is added, and the wool is re-entered into the bath. This cannot be considered a good method of working; the shades obtained are full and deep, and fairly fast, but there is usually a considerable loss of colouring matter, as the wool in no case abstracts the whole of the dyestuff from the bath; what excess is left combines with the mordant when the latter is added, forming an insoluble colour lake, which falls down to the bottom of the dye-vat and is wasted; or it may go upon the wool in a loose, unfixed form, and cause it to rub badly and come off in milling. Then it is rather difficult to dye to shade, much of the result depending on conditions over which the dyer has little control. Working as he does with dyestuffs of unknown colouring power, which may vary from time to time with every fresh batch of material, it is evident that although the same quantities may be used at all times, at one time a deeper shade may be obtained than at another, and as it is impossible to see what is going to be the result, and if by mischance the shades does not come up deep enough, it cannot be rectified by adding a quantity of dyewood to the bath, because the mordant in the latter will prevent the colouring matter from being properly extracted, and only a part of that which is extracted is fixed on the wool, the rest being thrown down in the dyebath, and partly on the particles of wood themselves, when logwood, camwood, etc., are used in the form of chips or powder. Dyers being well aware of this, are in the habit when mistakes occur of bringing up to shade with soluble dyestuffs—archil, indigo extract, and such like.

This method, as stated above, is very wasteful, not only of dyestuffs, but of mordants. In no case does the wool absorb the whole of the colouring matter from the bath; the unabsorbed portion goes down to the bottom of the bath when the mordant is added, so that when the dyeing is finished, the dye-bath is charged with a large quantity of colouring matter in unusable form, which has to be thrown away, thus at once adding to the pollution of the rivers into which it is run, and to the cost of the process of dyeing. As attention is being directed more and more to the question of the prevention of pollution of rivers, and as the waste liquors from dye-works add to the apparent pollution to a very considerable extent, dyers will have to develop other modes of dyeing than that of stuffing and saddening in one bath.

The principle of dyeing by stuffing and saddening may be carried out by the use of two separate baths; in fact it is done in the case of dyeing a cutch-brown from cutch and bichromate of potash. The goods are first treated in a bath of the dye-wood for a short time, then rinsed, and the colour is developed by passing into a saddening bath of the mordant. By this method, the baths, which are never quite exhausted, can be retained for future use, only requiring about $\frac{1}{2}$ to $\frac{3}{4}$ of the original quantities to be added for each succeeding batch of goods; in fact, in some cases, as in cutch, old baths work better than new ones.

The advantage attached to this method of working is that arising from economy of dye-stuff and mordant, and the reduction in the pollution of the stream on which the works are situated. The disadvantages are that the cost of labour is increased by there being two baths instead of one, and that the shades obtained are not always so full as with the one-bath method. This, of course, can be remedied by running the goods through the baths again, which, however, adds to the cost of the process; but there is this much to be said—the shade can be better brought up than by the one-bath process. In some cases the methods of mordanting, dyeing, and saddening, are combined together in the dyeing of wool; thus, for instance, a brown can be dyed by first mordanting with bichrome, then dyeing with camwood, and saddening in the same bath with copperas. The shades obtained are fairly fast and will stand milling. The disadvantages of this process are the same as those attached to the dyeing and saddening in one bath.

Now we come to the last method of dyeing wool with mordant and colours—that in which the operation is carried out in one bath. This can only be done in those cases where the colour lake that is formed is somewhat soluble in the dye-liquors, which usually have slightly acid properties; or where the affinity between the two bodies (colouring matter and mordant) is not great. This method can be carried out in, for instance, dyeing a cochineal scarlet, with tin crystals; a yellow from fustic and alum; a black from logwood and copperas and bluestone; a red from madder and bichrome; and the dyeing of the alizarine colours by the use of chrome fluoride, etc.

The shades obtained are usually not so deep as those got by the mordanting and dyeing process, but are frequently nearly so. In some cases, as in dyeing with fustic or logwood, it gives rather brighter colours, due to the fact that the tanning matter present in the dye-stuffs is not fixed on the wool, as is the case with the mordanting method, but is retained in the dye-bath. For dyeing with logwood and copperas or bluestone the process is not a good one, as it does not give as full shades as by the ordinary process. For dyeing with the alizarine colours, using chrome fluoride as the mordant, it can be applied with fair success. There is one advantage—a saving of time and labour and in the amount of steam required, all of which are important items in dyeing.

It is rather troublesome to match-off by this process, but it can be done. For light shades the process will be found very useful, as these cost less than by any other process. The dye-baths may be retained for future use, although in process of time they become too dirty for use, when they must be thrown away.

In these articles only the chemical side of the question has been dealt with. It is proposed in another series of articles to devote some attention to the dyeing of wool in its four different states of raw wool, slubbing, yarn, and woven fabrics, from a mechanical point of view; but it will be sufficient here to point out that chemically there is no difference between dyeing yarn in the piece or in the raw condition.

TANNIN ON COTTON: CHLORINATION OF WOOL.

At the last meeting of the Society of Chemical Industry (Manchester Section), Mr. Ivan Levinstein in the chair, Dr. Knecht made two communications on work which had been carried out under his direction at the Manchester Technical School. The first paper had reference to the amounts of tannic acid absorbed by cotton under varying conditions. He had estimated the amount absorbed under different temperatures, different times of immersion, and in baths of various

concentration, the results of his experiments shewing that with respect to temperature the cotton was best introduced at the boiling point of the bath, and left in for three hours while it cooled down; the absorption of tannin varied directly as the time of immersion, while with regard to the degree of concentration of the bath the amount taken up was not in any direct ratio; moreover, such chemicals as sulphate of soda, which were popularly supposed to increase the absorption of the tannin, were of no avail for that purpose. In an experiment with pure precipitated cellulose he had found that three times as much tannin was absorbed as in the case of the ordinary cotton fibre.—In his second paper, "entitled 'Notes on the Action of Chlorine on Wool,'" Dr. Knecht dealt with the chlorination process of preparing all-wool and cotton warp dyes for printing. Chlorination, he said, was generally practised at the present day in the case of indulines; for example, it was the means of bringing out light shades otherwise unattainable. He had been studying the theory of the action, and his experiments had shewn that, contrary to the statements ordinarily found in text-books, the action of dry chlorine on dry wool was practically nil, though in the presence of moisture much hydrochloric acid was produced, and about 60% of the wool was converted into a soluble brown substance, which had the property of forming insoluble lakes with the substantive dyes. The well-known action of chlorine in dyeing wool a deep shade of brown might therefore possibly be attributed to the influence of free chlorine. His experiments regarding the nature of this brown substance were now being extended.

MESSRS. GEORGE BELL AND SON, London, will shortly publish a book on the Dyeing and Printing of Silk, written by Mr. George H. Hurst, F.C.S., of Salford. This book will be illustrated by numerous dyed patterns, and will fill a vacant space in dyeing literature.

CALICO printers and dyers sometimes obtain effects by producing a metallic appearance. Generally they have confined themselves to the use of tin or zinc to produce silvery effects, as these metals are cheap. A patentee proposes, however, to use gold, uranium, silver, copper, and some other metals, but it is doubtful whether the process will come into general use, owing to the expense. The patent specification is not so full as could be wished, and it is doubtful whether it contains sufficient information to enable one to produce the effects described. The process of using gold is set forth in a little detail, but for the other metals all that is vouchsafed is that they are done in the same manner as gold. To any one at all familiar with the properties of the different metals, however, it is at once obvious that copper and iron cannot be applied in the same manner as gold. The process is essentially one of reduction, and then of polishing the metallic deposit so obtained by means of hot highly-polished iron plates or cylinders, either with or without pressure.

THE first coal-tar colour which was discovered belonged to the class now known as the basic series, which are applied to cotton by means of a mordant of tannic acid. For a very long time this class of colours was the only one known; then came the series of azo colours, applied to cotton by means of a mordant of tin, but by no means in a satisfactory manner. They were, however, of great use in wool dyeing, as they could be applied to that fibre in a simple acid bath. Following the azo colours came the series of alizarine dye-stuffs, not much used for dyeing cotton, although they can be applied by means of alumina and chrome mordants. These were followed at a long interval by the introduction of the now well-known Congo series of dye-stuffs, famous as being able to be applied to cotton in a simple saline or soap bath, which series has now grown to great dimensions, and is of great value to the cotton dyer. In a patent just taken out we find given the formula and method of manufacture of the first representative of a new class of dye-stuffs—for we think it likely that the number will be increased—which are characterised by being able to dye cotton in an acid bath. The colouring matter in question is derived from benzidine, which is already used as the base for the preparation of Congo red and others of the direct-dyeing cotton colours. Benzidine is transformed into tetrazo diphenyl, and this is first combined with naphtholdisulpho acid and then with methyl ether of salicylic acid. The result is a dye-stuff dyeing either wool or cotton

from an acid bath bright red shades. By alkylation this can be converted into another dye-stuff giving similar shades, but which can be dyed either in an acid or a soap bath. If the new products are as good as the patent says they are, they will come into extensive use.

News in Brief.

ENGLAND.

Accrington.

The strike at Middle Mills, Helmsshore, is now at an end, the masters having been able to get fresh weavers to replace those who came out on strike owing to the masters having dispensed with the services of a Weavers' Union committeeman.

Blackburn.

The notices of the spinners at Messrs. Coddington's Ordnance Mills have been withdrawn, the firm having commenced to pay the standard rate of wages.

Mr. Thomas Siddle, cotton mill manager, and Mr. Jonas Hindle, cotton manufacturer, have been elected to fill the post of borough auditors. These were the only nominations.

Bolton.

The death is announced, at the age of 45 years, of Mr. Isaac John Whitaker, proprietor of Bankfield Mills, Ringley.

The opening of the North End Mill was celebrated by a tea party and ball, held in the Baths Assembly Room, on Saturday, when about 300 sat down to tea. Through the absence of Mr. H. Mather, managing director, who is abroad on business, the chair was occupied by Mr. J. H. Greenhalgh, J.P. (director), supported by Mr. Forrest (Messrs. Dobson and Barlow, Limited), as shareholder in the North End Spinning Co.; Mr. Bedell (salesman), Mr. T. Sewell (spinning master), Mr. R. Isherwood (carder), and Mr. J. E. Haslam (warehouseman and secretary to employes). The chairman read letters of apology from Messrs. T. Holmes (chairman), Councillor Sharman, and Harold Mather (directors); also from Mr. Alderman Dobson, J.P. The chairman said he hoped they would all do their best to make the firm a name in the commercial world. Mr. Forrest then proposed the toast of "The directors, employes, and contractors" and spoke as to the mill being one of the best, being equipped with all the latest improved machinery, and raised by local money and contractors as far as possible. Mr. Bedell, Mr. R. Isherwood, and Mr. J. E. Haslam replied on behalf of the employes, etc. The rest of the evening was spent in glee, songs, and dancing.

The members of the Bolton Mill Managers' and Overlookers' Society assembled at the Woolpack, Deansgate, on Saturday evening, for the purpose of hearing a lecture on "The cone drum and the differential motion of the fly frame" by Mr. W. Scott Taggart (of Messrs. Doison and Barlow). The subject was of considerable interest to those engaged in the cotton industry, and the lecture was followed with close attention. Mr. T. Alston officiated as chairman, and briefly introduced Mr. Taggart, who, at the outset of his remarks, mentioned that a few weeks ago he read before the society a paper on the mule quadrant, shewing its effect in building a cop bottom. The present lecture dealt with a somewhat similar problem, though divested of many of the complications as regarded the mule cop, and involved in its solution one of the nicest problems in the whole range of practical mechanics. The question was how to build the bobbin of the fly frame by winding the rover or sliver upon it, and the lecturer shewed at some length, and in a very interesting manner, the method of solution. When taken from the draw frames, he said, the roving would scarcely hold together, but the little cohesion acted as a means of preservation, though when passing from the slubbing frame it was drawn out to such an extent that in order to hold together it had to be twisted slightly, the same being done in the intermediate and roving frames. Though twisted so often, the total amount of twist put in the roving was not generally more than two or three turns per inch, and considering this slight amount, when the sliver was drawn from half hank to four, five, or six hanks it must not be of a strengthening character. The manipulation in the winding was extremely delicate. The roving could be easily coiled in cans, but the subsequent process rendered it necessary that bobbins or tubes should be used to wind the roving, and this constituted the problem. Mr. Taggart here traced the mechanism applied, and the processes involved in adding layer upon layer on the bobbin, and said that one of the methods used for this purpose was the cone drum arrangement, the operations of which were fully explained by means of diagrams, tables, and calculations. Mr. Taggart also shewed how the roving was transmitted to the bobbin, stating that up to a few years ago the differential motion was the sole medium employed.—The lecture was illustrated by

lantern views, Mr. Mercer having charge of the instrument. Mr. Taggart had prepared the slides.—Votes of thanks to the lecturer and chairman terminated the proceedings.

Brighouse.

On Monday evening the workmen in the employ of Messrs. Joseph Richardson and Sons, Brookfoot Dye-works, came out on strike, as an advance was refused to three of the employes, whilst others received advances. Mr. Cockayne, of Leeds, a representative of the Union, interviewed the employers on Tuesday, with the result that the demands of the workmen were granted.

Bradford.

On Saturday the new engine which is to run the mill just erected at Cullingworth by Messrs. J. J. Broadbent and Co., Ltd., was christened "Alexander" by Master Alexander Colin Craven, only son of Mr. Arthur Craven, one of the directors of the company. After the christening ceremony a substantial tea was provided for upwards of sixty persons.

Bury.

The making of untruthful allegations is so rampant in trades-unionist official circles, that it is necessary to examine every point before it can be accepted. The threatened strike—involving several hundred hands—at Hampson Mills bleach and dye works, Bury, has been averted. Mr. Barker, the manager, required that certain statements which he alleged to be incorrect, in reference to alleged excessive overtime, contained in a letter addressed to him by the committee acting on behalf of the dryers, should be withdrawn, and an apology tendered to him; and this course having been agreed to, he has consented to reinstate the six dryers who had been discharged, and the dispute is consequently at an end.

Darwen.

Mr. J. Rawlinson's Industry Mill is being extended. When completed it will provide accommodation for 200 additional looms.

The new Technical School and Free Library at Darwen, the designs for which were accepted on Wednesday, will be commenced before long. The buildings will be placed with their frontages to Knott-street and Union-street, the principal elevations being to these streets. The entrance to the Technical School will be from Union-street. On the basement floor, which is on the level of Union-street, will be the Technical School, and on the ground floor, which is on level of Knott-street, will be the Free Library. A lecture theatre will be placed on the ground floor. The entrance to the Technical School will be through a roomy porch, which will open into the entrance hall, from which will rise a wide stairway leading to the lecture theatre, the students' reading room, and the art school. The classrooms will be ranged on the main corridors in proximity to the central departments of chemical laboratories and weaving rooms. The chemical laboratories will be centrally located. A number of other rooms will also be made on the basement floor. The lecture room will be so constructed as to accommodate 200 students in gallery form. The students' reading room or library will be placed in a pleasant position. The building will be in simple Gothic style of no particular period, and the estimate of cost is £7,998.

Glossop.

An indignation meeting of weavers was held at the Town Hall on Wednesday night to protest against the dismissal by the firm of Messrs. Sumner of one of their employes, who is the secretary to the local Weavers' Association. The following resolution was adopted:—"That this meeting, having heard of the dismissal of our secretary, deeply regrets the action of the firm in discharging him, and strongly condemns the arbitrary course; and we leave the matter in the hands of our Committee and the Committee of the Northern Counties Amalgamation to deal with."

Great Harwood.

The Union Mill, lately erected, is almost finished. A limited company is being formed to work it, with £50 shares. The mill will hold 760 looms.

Haslingden.

The notices of the operatives of Hazel Mill having expired on Wednesday of last week, the mill closed on Thursday morning. As some of the operatives on Saturday expressed a wish to return to work, the mill re-opened on Monday morning, when a number of the operatives (not union members) returned to their work, and the mill re-started work again, but the principal majority of the operatives will abide by the decision of the union officials.

Huddersfield.

On Saturday night a fire occurred in the knotting and mending shed at the mill of Mr. J. E. Crowther, manufacturer, Barkfield-road, Linthwaite. Damage to the amount of £500 or £600 was done.

At the Huddersfield West Riding Police Court, on Tuesday, Messrs Benjamin Vickerman and Sons, Limited, manufacturers, Thongsbridge, were summoned by Mr. J. D. Prior, an inspector under the Factory Acts, for having employed Bridget Quinn and Harriet Wood, two girls, during the period allowed for meals. Mr. R. P. Berry appeared for the defendants, who were fined 5s and expenses, the Bench considering that only a technical offence had been committed.

Keighley.

Some months ago it was stated that the trustee under the deed of assignment made by Messrs. J. and J. Craven and Co., worsted spinners and manufacturers, Keighley, would pay 20s. in the pound in the case of all the firm's liabilities, as well as 4 per cent. interest on outstanding debts. The principal was paid months ago, and the creditors have now received the promised interest. The whole of the claims against this old and respected firm, which in former years played so important a part in the Bradford trade, have thus been settled. The total liabilities were £135,000.

Kidderminster.

A fire broke out on Saturday morning at Messrs R. Smith and Son's Mill-street Carpet Works. The stove-room over the boilers, used for drying worsted yarns and pile, was discovered to be on fire, and the flames quickly spread and reached the roof. Loss, about £600 or £700.

Leeds.

At the monthly meeting of the Chamber of Commerce, held on Wednesday, Mr. W. Beckworth, in retiring from the presidency, reviewed the work of the Council for the past two years, regarding it as satisfactory, especially as to the formation of the Board of Conciliation. Colonel Harding was elected president, on the motion of Mr. Bousheld, seconded by Mr. Zossenheim, and Mr. J. L. Peate was chosen as a vice-president. The question of a united exhibit from Leeds at the Chicago Exhibition was referred to a committee. The matter of a textile museum for Leeds was referred to a sub-committee to arrange for Professor Beaumont, of the Yorkshire College, to attend the Council and describe his scheme.

Nelson.

A mass meeting of weavers was held in the theatre on Monday to consider the terms of the proposed settlement of the strike at Nelson agreed to by the weavers' delegates with the employers' representatives. Under that agreement the weavers were to resume work at Walverden Mill on Tuesday, and the board of enquiry, consisting of five selected representatives of the employers and employed would then meet and enquire into the weavers' grievances. The meeting, by an overwhelming majority, rejected the arrangement made by the conference, and required the unconditional discharge of an overlooker and the non-union hands at the mill before the strike hands resume work. For several hours on Thursday Nelson was in a state of tumult. A board of enquiry assembled at the Liberal Club, and were engaged in investigating matters concerning the overlooker whose unconditional discharge is demanded before the weavers will resume work at Walverden Shed. A crowd assembled in the neighbourhood of the club, and the police had difficulty in clearing the streets. Several persons were injured. The overlooker was accompanied to his home by a crowd, who threw mud and stones at the police. The overlooker got safely home, and several constables were left to protect his residence. The enquiry was adjourned until to-day.

On Tuesday a further contingent of 30 of the county constabulary took up their quarters in the Nelson Fire Brigade Station, where 50 of the county police force who had been brought into the town were billeted. The tackler, H. Greenwood (whose unconditional discharge, as well as that of the non-unionists working at Walverden shed, the Weavers' Association demand before the strike hands resume employment), has issued a challenge to the Weavers' Association Committee. This is posted on the hoardings in the town, and Greenwood says he will prove his entire innocence of the grave charges made against him by the committee of the Weavers' Association, before the committee or any body of men and any place the association may select. The collections in the neighbourhood last week in aid of the strike fund amounted to £81 12s.—On Wednesday, at Colne, James Lowe, weaver, Nelson, one of the pickets for the strike hands at Walverden Shed, Nelson, was summoned for assaulting Hartley Farnell, carter, Nelson, whose daughter works at the mill. The case was before the Court last week, and Farnell then refused to be sworn. He now said that he called the defendant a clown before he struck witness on the face with his open hand. He took the summons out in a temper. The Bench dismissed the case.

Oldham.

Mr. John Cottam, the new manager of the Ellen-road Spinning Co., has entered upon his duties this week.

Mr. Joseph Holden is severing his connection with the Shiloh Spinning Co., Shaw, of which he was manager.

Oldham Joint Stock Bank have this week taken possession of their new and extensive premises in Union-street, Oldham. This Company, which was formed in 1880, now possesses a reserve fund of £130,000.

The machinery for the No. 2 mill belonging to the Royal Mill Co., Rochdale-road, Oldham, is being supplied by Messrs. Asa Lees and Co., Limited, Oldham, and Messrs. Ashworth, the latter providing the carting engines.

The directors of the Crompton Spinning Co. have given out orders for four new boilers, two each being supplied by the Oldham Boiler Works Co., and Messrs. Tetlow Bros., of Hollinwood.

It is reported that one of the operatives' organisations had threatened to 'strike' a mill in this district unless the non-unionists employed at the concern either joined their body or were discharged. We understand the seeming difficulty has been overcome by the work-people doing the needful by deleting the prefix "non"

Holly Mill Co., Royton, have arranged for the delivery of machinery on the first of the next month, and it is expected that early in April spinning operations will be commenced. The engines will be ready for work in the course of a week or two. The whole of the machinery is being supplied by Messrs Platt Bros., Limited, Oldham.

The Prince of Wales Spinning Co. are having extensive alterations carried out in connection with their steam engines, boilers, etc., and the mill will be closed at Easter for two or three weeks. The engines are to be tripled, and three new boilers put down in place of the four now working, while new economisers will also be put in.

At the recent quarterly meeting of the Boundary Spinning Co., the chairman in referring to the tripling of the steam engines and the putting in of new boilers said the saving in the value of coal comparing with the corresponding quarter last year was £112, which was equal to a return of 10 per cent. on the outlay. They were also obtaining better turning. The engines and boilers, he remarked, were now practical y a new plant.

The question of alterations to steam engines and the putting down of new boilers is one which is coming prominently before the notice of the directors of the Oldham spinning Cos., and must continue to do so for some time. A considerable number of these concerns have been at work for about fifteen years, and the high speeds at which machinery is now run is having its effect. Economy is the great desideratum sought. This is said to be the great reason which is leading the directors of many of these concerns to adopt triple expansion, which system is regarded as most economical in its working. The smoke question and the price of fuel are moving men to action.

At the annual meeting of the Oldham Master Cotton Spinners' Association yesterday (Friday) week, it was stated that towns representing about seventeen million spindles had become affiliated with the new cotton trade Federation formed in Manchester on Tuesday week. The Oldham Association it seems, during the year, has made great progress both in the accumulation of its funds and the increasing of its membership. The present state of trade also came under discussion, and it was left optional with the committee whether they go in for short time or a reduction of wages. Both these matters, it is understood, will come before the next meeting of the new Federation.

Rochdale.

The marriage of Mr. Charles Pilling, of the firm of Messrs John Pilling and Sons, cotton spinners, Rochdale, to Miss Maggie Clegg, daughter of the late Mr. Charles Clegg, of the firm of Messrs John Clegg and Sons, cotton spinners, of Shaw and High Crompton, took place on Wednesday afternoon at Balderstone Church. Messrs Pilling's mills were stopped, and in honour of the event cannon were fired at the mill, and the flag was hoisted.

Shipley.

A largely attended meeting of the Shipley Textile Society was held in the Shipley Technical School yesterday week, when a highly interesting lecture was delivered by Mr. W. W. Whitehead, president of the Yorkshire College Textile Society, on "The Romance of Trade."

Stockport.

The Vernon Spinning Co. Limited, on Monday were fined for breaking the Factory Act by working three young women before six o'clock on January 16th.

Tyldesley.

Notices have been posted at all Messrs. Burton and Sons' mills, Tyldesley, stating that, owing to the unsatisfactory state of the cotton trade, unless a change takes place in the meantime, they hold themselves at liberty to commence working short time from the 4th of March. This will affect over 2,000 workpeople.

SCOTLAND.

Aberdeen.

The Rev. Henry Williamson, of Dundee, a notorious stirrer-up of strife, if not of enmity, addressed a meeting last week under the auspices of the Aberdeen branch of the Dundee and District Mill and Factory Workers' Operative Union in connection with the organisation of female factory workers in the schoolroom of the Unitarian Church, George-street. There was a poor attendance, only about a dozen being present. The rev. gentleman spoke of the benefit of organisation. He was quite satisfied that if the women workers could be got to organise it would be the means of improving their condition. He strongly advocated the formation of unions, and pointed out that by the means of the Dundee union the wages of women there had been raised 30 per cent. during the past few years. He also spoke of emigration as domestic servants as a means of bettering the conditions of life of the female factory worker. At the close a committee was formed to further the interests of the union.

The report by the directors of the Aberdeen Jute Co., Limited, states that, although the result of the working of the past year has been below the average of former years, circumstances of an exceptional nature have produced a sum at credit of profit and loss account far in excess of the profits actually made in manufacture. The credit balance for the year amounts to £7,805, which, with the amount brought forward from last year, places a net balance of £7,910 at disposal. The directors deemed it prudent in the winter of last year to buy raw material in advance of their requirements. Since these contracts were made jute has increased in price, and to this cause must be attributed the satisfactory credit balance which has to be dealt with. The directors draw attention to the fact that the machinery and plant generally are getting old, and that at no distant date they must anticipate having to make heavy outlays on that account. The directors recommend that the balance be disposed of as follows:—In paying a dividend of 1s. 6d. per share, £3,187 7s., and depreciation, £4,500, carrying forward a balance of £223 5s. 3d. During the year Mr. John Miller resigned his seat at the Board. Mr. Alexander Ogston Gill has been appointed in his stead. The retiring members of the Board are Mr. R. White Mackay and Mr. George Tough, and both are eligible for re-election.

Dundee.

Yesterday week, 1,000 bales of jute cuttings were exposed for sale by public auction in the warehouses of Messrs. Fleming, Douglas, and Co., Trades Lane, Dundee. One hundred bales were sold at £9 per ton. The remainder of the material was withdrawn.

An adjourned meeting of Dundee jute spinners and manufacturers was held yesterday week in the Royal Exchange to further consider the proposal to put the mills and factories on short time for six months by closing them on Saturdays. There was a large attendance, no fewer than 40 firms being represented. Mr. Alexander Henderson presided. The committee, which was augmented at the meeting on Tuesday afternoon, reported that they had waited on the firms which had not previously signed the agreement expressing their willingness to put their works on short time, with the result that, after laying the whole question before these firms, several of them had seen their way to join the movement. There were, however, six firms—two of which were chiefly engaged in the flax trade, and did not manufacture jute to any great extent—who, in consequence of having time orders on hand, declined to co-operate. The Committee at the same time reported that the manufacturers in Tayport and Monifieth had agreed to join them in Dundee.—The meeting regretted that every manufacturer in Dundee had not decided for short time, but it was believed that as great unanimity as was possible had been obtained.—The Secretary reported that the adhesions to the movement now amounted to 90 per cent. of the trade, which represented a total annual consumption of a million bales of jute, the exact figures being 998,750 bales.—The meeting unanimously agreed that short time should be adopted by the mills and factories being closed on Saturdays, and that the movement should begin on Friday, the 25th March, and continue for six months.

Glasgow.

The Glasgow warehousemen and traders on Saturday took a second step to manifest their hostility to the working agreement between the North British and Caledonian Companies by instructing their agents in Manchester, Liverpool, Birmingham, Bradford, etc., to forwards all goods for them in Glasgow *via* Midland and Glasgow and South-Western Lines. They resolved on the Friday, as reported, to send their goods from Glasgow to England by the same routes. The South of Scotland Chamber of Commerce intend to ask the Board of Trade not to homologate the agreement until third parties have been heard upon it.

The following table gives the value and destination of the exports of cotton and linen goods from the Clyde

for last week, and also the totals to date for the year. The first line refers to cotton goods, and the second to linen:—

India and China.	U. S. and Canada.	W. Indies & S. America.	Australasia.	Africa and Egypt.	Continents.	Total.	Totals for year to date.
£103,745	17,477	8,104	—	—	70	129,506	719,883
859	20,439	520	—	—	58	21,857	172,614

The following are the total values of the export for the same eight weeks of last year:—Cotton, £684,259; linen, £172,152.

Kirkcaldy.

Malcolm's Mill, at the east end of Kirkcaldy, is to be reopened as a spinning mill by Mr. Luton, Auchinblae, who has just leased the premises for that purpose. The mill was last occupied by Messrs. Swan Brothers.

Paisley.

A private meeting of the heads of the Thread Combination was held on Wednesday afternoon. Part of the business was to arrange matters in view of the revised lists to be issued on the 1st prox. It is said the Paisley manufacturers are desirous that Messrs. Chadwick, of Bolton, Lancashire, should also join the combination. A representative of that firm was also present at the meeting.

IRELAND.

Ballynahinch.

The committee of the flax market have issued a circular to the farmers, urging them to give up the practice of selling their flax at the mills, stating that they have received intimation from several large firms, who send buyers to the market, that unless the flax is all brought to the town market, their buyers will not attend in future. Farmers should comply with this sensible advice, as should buyers stop coming to the market they would be obliged to take whatever price was offered at the mills.

Belfast.

Mr. W. R. Patterson has received the following note from the firm of Messrs. William Ewart and Son, Limited:—"What you stated at the annual meeting about the real reason for the dismissal of one of our lappers was perfectly correct. At the time his notice-docket was written we did not know who were union men and who were not, and that question was and is immaterial to us, provided the work be faithfully and agreeably done. He had been interfering so frequently with some of his fellow-workmen on the subject of the quantity of work they were doing that he had to be placed in a part of the lapping-rooms where he could be under the constant supervision of the foreman at his desk. He himself need not deny the interference. He does deny that he 'intimidated,' which was never alleged. This matter of the reduction of the quantity of work to be turned out was felt in several other houses at the same time or shortly after, and it went so far that, in our own case at least, a scale of the quantity that would be permitted was served out to the men. We have in our possession one of the copies of that scale, which reduced the quantity in some classes of goods by 10 per cent., 20 per cent., and even 40 per cent. on what the men had been doing before."

Miscellaneous.

REMINISCENCES OF DUNDEE TRADE.

II.

In the second decade Dundee trade was very fluctuating. The interest in municipal matters then centred in the High-street, which mainly consisted of shopkeepers, then more than now an important factor in shaping public affairs. Those representing the staple trade of the town consisted of two classes—the "Green-cloth" or "Cowgate Merchants" proper and the Manufacturers. Chief among the former was Mr. John Baxter, of Idvies, who was one of the first to buy linens and to export them on what was then a large scale. The office at the foot of King-street long occupied by that gentleman was afterwards occupied by his nephew, Mr. Edward Baxter, and in it several young men were educated, such as Mr. Alexander White, uncle of Mr. J. Martin White; Mr. Thomas Smith, Mr. Alexander Anderson, of Grange, Nicoll Bell, Mr. William Brand, of New York, and subsequently of Milnfield; Mr. R. Fleming, now of London, and others. It is now possessed by Messrs. Grumond. Mr. Wm. Baxter, of Ellengowan, a brother of the above, head of the well-known firm of William Baxter

and Son, Queen-street, was also a prominent figure on the market, and many will yet remember his venerable-looking figure. His son, Mr. Edward Baxter, long United States Consul at Dundee, received an excellent mercantile education in Liverpool, and on joining his father he was the means of introducing many important new rules and practices into the Dundee trade, which till then were of an extremely primitive character. Other buyers and exporters of goods were Mr. Andrew Brown, who, it may be mentioned, built the Bell mill—the first fireproof mill in Dundee; Mr. John Blair Miller, father of Mr. R. A. Miller; Mr. Robert Millar, Cowgate; Messrs. Stirling and Martin, Bain Square, subsequently David Martin and Company, a firm which at that time also did a large business in yarns and flax. It was said that at the height of Napoleon's power in Europe they paid £28 a ton for the freight of some Russian flax. Mr. William Sandeman was chiefly a yarn bleacher and finisher of linens at Douglasfield, but was also a buyer of cloth. He tried to establish the bleaching and finishing of linens, but this branch of his business was not successful. All these gentlemen dressed well, generally in black, with white ties, and had a dignified appearance much beyond their successors. A well-known character of these days was Mr. John Watt, also an importer of flax. He was a man of most penurious habits, and never would sell at a loss, and held goods for long periods, sometimes to their very serious deterioration and loss, as was seen after his death. He would expend nothing on clerks or book-keeping.

Most of the buyers of linen acted as agents for the great West India houses, which had representatives in London, Bristol, Liverpool, and latterly Glasgow. Mr. David Baxter, the second son of Mr. William Baxter, and subsequently Sir David, of Kilmaron, was connected with the sugar refining industry. The "Sugar House," a brick building of seven storeys, then the highest in Dundee, stood in the Seagate, on the site now occupied by the warehouses of Messrs. Jaffe Brothers and Co. These warehouses were the first erected in Dundee in the style similar to those in Manchester. Mr. Baxter subsequently joined his brothers John and William, and formed the present eminent firm of Messrs. Baxter Brothers and Co.

The manufacturers of these days were really the practical men of the trade. Their places of business were scattered throughout the town in various directions, though their sale shops, then called "cellars," were chiefly situated in the Cowgate, between Queen-street and Wellgate. They consisted of two classes—the manufacturers of linen proper and those who made cotton bagging, which last had "factories"—*i.e.*, high buildings with open wooden sides—for drying the starched warps with fire-carts.—*Dundee Advertiser.*

THE PARIS TRIBUNAL OF COMMERCE.

One of the most serious drawbacks of English commercial and industrial life is the almost general absence of skilled competent tribunals, before which the disputes that arise—often well meant enough and honest on both sides—can be tried and decided. The administration of justice in our law courts in such cases is utterly unsatisfactory, the verdicts very often going in favour of the most unscrupulous party, who is very greatly tempted to perjure himself or themselves, trusting to the non-acquaintance of both judge and jury with the matter in dispute, and therefore with their incompetence to distinguish on which side the truth is to be found. Where it is a case therefore of pure wickedness, the latter triumphs in more than two-thirds of the causes tried. This leads to appeals from one court to another, involving enormous expense, and in every instance without any improvement in the chances of the wronged party. A case in which the value of the matter involved could not be over £500 was recently tried in that old feudal court, the Chancery Court of the County of Lancaster, and has passed from one court to another, until the litigants have been involved in expenses that cannot amount to less than £15,000—with the most dubious and unsatis-

factory result in the end. Of course this sort of litigation suits legal gentlemen, but it should hardly be regarded in the same light in the commercial community. What is wanted to save them from this sort of thing is the formation of Tribunals of Commerce in connection with all our Chambers of Commerce, and the reference of such disputes to their arbitration. Already there are a number of such tribunals in existence, and we would urge upon all parties who may be unfortunate enough to become involved in such disputes to have resort to them if possible in the first instance. Of course where people are meaning to evade their just liabilities they will refuse to go before them. In such a case there is nothing left but the law courts, of which there is so much complaint. We may illustrate the value of the former institutions by adducing the experience of that of Paris for the past year. In accordance with custom, the President of the Paris Tribunal of Commerce, the members of which are elected annually by their fellow-citizens for settling commercial disputes, at the first meeting in the current year, delivered an address, passing in review the work done by the tribunal during the past year. The figures which he quoted shew the importance of the tribunal, for the number of cases heard by it in 1891 was 53,737, or 1,487 more than in 1890, and out of these only 1,573 were not actually disposed of by the end of the year. A very strong proof of the competency of this tribunal is afforded by the fact that only 2,393 appeals were lodged against its decisions, and that only 239 of these were successful. The number of cases referred to arbitration was 9,345, as against 9,146 in 1890. We have no information as to the costs of the proceedings, but it is inevitable that they have been much less than those of our own cumbrous machinery, and with results far more satisfactory.

CARDROOM TRADES-UNIONISM.

Mr. Mullin, secretary of the Amalgamation of Card and Blowing-room Workers, has, we observe, been directing a little attention to, and criticising, *The Textile Mercury*. The point he touched was a very minute one, relating to the construction of a sentence. It may or may not be correct: we have not taken the trouble to refer. If Mr. Mullin wants something to do, we can find him matter of more importance, and more worthy his capacity and official status. Will he kindly make it clear how the poor non-unionist workers have to conduct themselves in the light of the treatment indicated by the following correspondence, the originals of which have been in our possession, and from which our copies have been made. We omit the names and dates given in these documents in order to shield the worker affected. Our readers may accept our affirmation that the documents are genuine, and the transcriptions are correct:—

—Card and Blowing Room Operatives' Association.

M.—At the quarterly meeting of the above association held last Wednesday night Oct. 8th it was unanimously Resolved that you be expelled (*sic*) from the above association Thereby forfeiting (*sic*) all claims from this society

Signed on behalf of the members and committee
Yours — Sec.

This, be it observed, is a notice of expulsion with no cause assigned. Some time elapses and the "expelled" person receives from the same society the following:—

CARD AND BLOWING ROOM OPERATIVES'
ASSOCIATION.

DEAR M—

I am directed by the Committee of the above Association to draw your attention to a resolution which has been passed by the members of the above Society, namely, "To strike work against all those persons who, whilst employed in the Card and Blowing Room, refuse to become members of their trade society."

Trusting you will be able to see your way to join the Association at an early date, and thereby avoid placing yourself in a very unpleasant position.

I remain your obedient servant,
Secretary.

Will Mr. Mullin kindly inform his constituents and others outside the pale of his confederation

of associates what they are to do in order to keep in his and their fellow-workers' good graces? Surely there ought to be some method found as a practicable substitute for such "kicking out" and "kicking in," because it may be continued indefinitely, and in that case would become unpleasant.

BLACKBURN CHAMBER OF COMMERCE.

LIEUTENANT JEPHSON ON THE DEVELOPMENT OF AFRICA.

The annual meeting of the Blackburn and District Chamber of Commerce was held on Wednesday last week in the Committee-room at the Town Hall. There was a very large attendance of members and of the general public, including a number of ladies. Alderman Henry Harrison, J. P., President, occupied the chair.

The following gentlemen were elected directors for the ensuing year:—Messrs. Bickerdike, A. Heyworth, James Bullough (Darwen), J. Whittaker, W. B. Huntingdon (Darwen), J. Peters, J. Hacking, J. E. Sharples, and Henry Livesey.

THE PRESIDENT'S ADDRESS.

The President, in the course of his annual address, said: The business that has engaged the attention of the Chamber during the past year of major importance, its new French tariff, railway rates and charges Companies Amendment Bill, development of our markets with Western China, Rating of Machinery Bill, Indian factory legislation, fluctuation of exchange, extension of railways in India, infraction of treaty, rights of importation of British goods into China, and Imperial Federation. Many minor matters requiring notice have had the careful attention of the Board, but require no particular mention on this occasion. The Chamber has not yet received an official English copy of the new French tariff, which is the latest development of Continental protection, but there is no reason to doubt that the Bill as passed by the French Legislature is substantially the same as already submitted to us. It is a hostile and unfriendly measure towards this country, to our shipping interests, to our engineering, woollen, cotton, silk, and other industries.

The minimum tariff is a high tariff, and yet based upon a power delegated to the Executive Government of the day of fixing the minimum rates for imports, with power to bargain with foreign Governments for exceptional terms for the privilege of the minimum tariff. Our Government having nothing to give, our powers of negotiating for exceptional treatment are nugatory. This matter of railway rates and charges, which is of so much importance to us, has had the attention of the Chamber on many occasions, and meetings in Manchester and in London have been attended by members of the Board and by the secretary to endeavour to safeguard the interests of the trade. The Chamber regrets to report that the results of its labours have not been satisfactory. They can record no success. The railway companies generally have maintained their position and gained some slight advantages. The Companies Amendment Bill has received the due consideration of the Chamber, and the president, with Mr. Malam Brothers, attended the conference called by the Manchester Chamber of Commerce. The provisions of the Bill and numerous amendments were most carefully considered and discussed, and the Bill, as approved by this large and representative body, was left to Sir W. H. Houldsworth and a parliamentary draughtsman to be prepared for submission to the House of Commons by Sir W. H. Houldsworth and other members of Parliament. There were many suggestions and clauses which had to be given up in order to give the Bill a fair chance of becoming law in view of the hostility of the legal profession.

The development of trade with Western and Southern China is a matter of national importance. It was dealt with most exhaustively by Mr. Holt-Hallett at the last annual meeting. That address has had the careful attention of the Chamber, who see the high commercial and political importance of the views laid down by Mr. Hallett. During the past year the Chamber has had under its notice the projected railway from Mandalay to Kunlon Ferry, on the river Salween, and on due consideration of this scheme they are of opinion that the proposal of Mr. Hallett to connect Rangoon or Martaban with Ssumao, which lies to the east of the Makong or Cambodia river, is a far more comprehensive, important, and complete plan of reaching the trade of Western and Southern China than the suggested railway to Kunlon Ferry, and meets with the entire approval of this Chamber. A railway from Rangoon to Martaban, *via* Karennee, and through the British Shan States to Ssumao would have the great advantage of placing us on a fair footing for competing with the French for the trade of Southern China, besides developing the trade of Karennee and the Cis Salween and Trans Salween British Shan States, and giving a connection near Kiang Hsen with

the Siamese main line, which has recently been surveyed by British engineers for the King of Siam, and is intended to extend from Bangkok, the capital of Siam, to Kiang Hsen. Such a connection would tend to greatly increase British commerce, and would add considerably to the remunerative prospects of the proposed railway and to the development of our trade with Western China.

The Rating of Machinery Bill, so important to all of us and so just and necessary, has had the attention of the Chamber, and no efforts have been spared to place it on the Statute Book. This matter is of the most wide-reaching significance to the manufacturing interests of this country, but its technical nature has hitherto baffled lawyers and members of Parliament in drawing a Bill that would do no injury to the various trades and industries that might be governed by its incidence. A deputation from the Chamber attended a conference of almost all the industries interested in the Bill at the Manchester Chamber of Commerce, under the presidency of Sir W. H. Houldsworth, when resolutions were passed which will, in the opinion of that meeting, meet the whole of the objections raised by hostile critics in Parliament.

Indian Factory Legislation has also received the attention of the Chamber, but it is with extreme regret that owing to the indifference of the public generally and the apathy of the leaders of the working classes engaged in the textile trade of Lancashire, Cheshire, and York-hire, the Chamber is unable to report any satisfactory result from their labours for the amelioration of the condition of the Indian factory workers. An early opportunity will be taken by this Chamber to again urge the importance of the subject upon her Majesty's Government.

As to Indian railway extension, we ask your attention to the remarks made by Mr. Hallett at the last year's annual meeting and reported in the last annual report. This very serious question merits and demands our careful attention in the interests of the people of India and of our manufacturing districts. According to the figures given by Sir John Gorst in his address at Liverpool, the total length of railways in India last November was 17,300 miles. Of this mileage 3,640 belong to companies guaranteed by the Indian Government. 1,300 miles are the property of the native States, and 12,900 miles are the property of the Government. The rate of increase during the last six years has averaged about 833 miles per annum in a country 27 times the size of England and Wales—a beggarly account for the Indian Government to publish. The expenditure per annum is a little over ten million rupee pounds, or say 7½ million pounds sterling. This sum is a simply absurd expenditure in a country so destitute of railways and where the population is rapidly increasing. When we consider the absolute and immediate necessity for railway extension in India, such an expenditure seems absolute neglect and indifference to the welfare of our Indian fellow subjects and to the first duties of government. The railways in which this Chamber takes the greatest interest are the Kurrachi and Delhi connection, the Chittagong and Assam Railway, and the Rangoon or Martaban connection with Ssumao. In the opinion of the Chamber the first and paramount duty of the Government of India is to arrange proper financial facilities to carry forward these most desirable commercial enterprises. There are other reasons for carrying out these railways besides the highly necessary development of British and British Indian commerce. The welfare and happiness of our Indian fellow-subjects is greatly increased wherever a railway is made; and the State is a great gainer, directly by the increase of its revenue, and indirectly in the facility for the movement of stores and troops, and for the general government of the country.

The Chamber has been in communication with the foreign secretary in regard to the infraction of our Treaty Rights in China. This very important question of the violation of our Treaty Rights, which has for many years crippled our trade in China, has called the attention of the Chamber to a signal anomaly in the conduct of our affairs in China. As far as we can learn there is no department in any of our public offices for the care and supervision of our relations with that country, in so far as the consular and mercantile affairs are concerned. At present what is done is done by the Foreign Office in a hole-in-the-corner fashion. There is no department specially devoted to this important interest, and the consequence is that the care of our vast trade, our consular reports, our trade statistics, and our commercial relations with China are relegated to somebody or other between our Ambassador in China and the Archives of the Foreign Office, of whom we can learn little or nothing, and who appears to take no interest in safeguarding our Treaty Rights and in improving our commercial relations with China.

Imperial Federation is now engaging attention of the Chamber. A most disturbing element to the cotton trade of Lancashire throughout the whole of the past year has been the constant fluctuations in exchange with silver-using countries. The year opened with

exchange on Bombay at rs. 65-16d. per rupee for telegraphic transfers, and fluctuated continuously with a downward tendency till June, when it touched rs. 4½d. This was followed by a rise until the middle of September, the highest point in the autumn being rs. 5½d., but it has fallen uninterruptedly since September, and on December 31st stood at rs. 4 19-32d. These severe fluctuations, representing in their extremes fully 10 per cent, have not only occasioned great anxiety to spinners and manufacturers, but have checked and retarded business in a marked degree, and to this cause is undoubtedly attributable part of the falling-off in our exports to the Eastern markets. The shipments of cotton cloth to those markets in 1891 was 230,000,000 yards less than in 1890, and represents more than the total falling-off in 1891 to all countries (212,000,000 yards). It may be added that the fall in exchange has continued since the end of December, and on February 2nd silver touched the lowest point in history, 41s 0½d. per oz., with exchange on Bombay at rs. 3 29-32d. for telegraphic transfers, and rs. 3¼d. for 30-day bills. Until exchange steadies, no satisfactory business with the East can be expected, and the desire frequently expressed by this Chamber that an effective remedy should be sought, so as to secure a stable par of exchange, has been greatly accentuated by the events of the last twelve months.

There is no subject connected with the duties of the Chamber that has demanded and received more care and attention than the short report generally given upon the state of our trade, and especially the trade of North-east Lancashire, in spinning and manufacturing. We have sought information in all quarters upon this naturally very difficult subject, and the Chamber has been convinced that the staple trade of this district has been unprofitable, and seriously unprofitable, in the past year. The Chamber is of opinion that the chief causes of this depression are the great falling-off of our exports to the East, the decline in the rate of exchange with our silver markets, the consequent difficulties in carrying out the contracts entered into with foreign customers at a time of an abnormally high rate of exchange, and the increase of hostile tariffs in America and elsewhere. (Applause.)

MR. JEPHSON'S ADDRESS ON THE DEVELOPMENT OF AFRICA.

Mr. JEPHSON, who was received with applause, said he laid no claim to any technical knowledge of trade and commerce, but, in response to requests, he had agreed to address a number of Chambers of Commerce on the development of trade in Central Africa from knowledge gained by keeping his eyes and his ears open while travelling in that continent. Comparatively little was known of Africa. Three quarters of the British public thought that Central Africa was either one huge desert or an immense forest, but, as a matter of fact, it contained vast tracts of fertile land which were only awaiting cultivation to yield a practically unlimited supply of raw material to feed our factories. There was also a vast negro population ready to exchange our manufactured goods for raw products. It was impossible entirely to separate trade and philanthropy in Africa, for they must, to a certain extent, go hand in hand. Anyone reading the history of the march of civilisation in Africa must be struck by the fact that most of the important and lasting benefits to civilisation in Central Africa were due to trade. The British East Africa Company, as they all knew, was largely composed of Scotch and English gentlemen, whose philanthropic instincts were as proverbial as their instincts for business and commerce. He considered that Uganda, owing to its position, to its command of an extensive waterway and to its healthy climate, was as much the key to the rich countries of the interior as the Suez Canal was the key to India. As trade and commerce increased through the construction of a railway from Monabasa to the Victoria Nyanza, and when steamers were put upon the lake, the importance of Uganda, as the up country headquarters, would increase in proportion. Every traveller who had visited Uganda invariably spoke of it as a country with a great future, and with almost unlimited possibilities of trade. Speke, Stanley, Mackay, and Emin Pasha, all spoke of it in enthusiastic terms. The healthiness of its climate for Europeans, the richness of its soil for cultivation, the vast superiority of its people over surrounding tribes, its central position and command of an extensive waterway, all marked it, they said, as the country of the future in connection with equatorial Africa.

In Uganda itself coffee, equal to that of Mocha or Ceylon, grew wild in great abundance, and might become, with cultivation, a great source of wealth and revenue. The people of Emin Pasha's province being chiefly Turks and Egyptians consumed large quantities of coffee, the greater part of which came from Uganda, and all bore testimony to the fact that, if properly cured, it was fully equal to the ordinary trade coffee obtained from Khartoum, which came principally from Arabia and Ceylon. He had considerable practical knowledge of tea, and believed the cultivation of it in

Uganda would be a success, though the plant was not indigenous. On their march down from the Equatorial province they passed a great number of shaded fertile bottoms on the banks of rivers, which were eminently suited for growing tea. The land required but little clearing, and there was unlimited water power at hand.

Uganda had also for many years been the great up-country depot for ivory, which drained into it through the various trade routes. At present it scarcely paid to carry ivory to the coast, but ivory did not spoil if carefully housed, and, when the country was a little more settled, depôts for storing ivory should be formed in readiness for the coming of the railway. In Emin Pasha's province ivory was the monopoly of the government, and he (the speaker) had seen thousands of pounds of it which had been stored for years, and which was just in as good a condition as on the day when it was brought in. He had heard people sometimes say that ivory was an article of commerce which would soon be exhausted. He thought the people who said that would alter their opinion considerably had they any knowledge of the countries which lie about the head waters of the Nile. He himself saw in the countries round the equatorial provinces enormous herds of elephants, and the forests through which they passed abounded in them. The vast stores of ivory which Emin had collected had been got together in three years, and during a great portion of that time he only stored what friendly chiefs brought him as presents, as after the fall of Khartoum he did not think it likely that the ivory could ever be carried down to the coast. The store thus got together would be worth £112,000 at the coast, at 8s. 6d. per lb., and if Emin had gone on collecting all the time, as he did at the beginning, the amount would have been double. None of the Pasha's ivory was bought, it must be remembered. It was all collected as a government tax. They could imagine, therefore, what a vast quantity there must be in all the forest countries adjoining the equatorial province, most of which countries were included in the British sphere of influence. In all these upland countries, lying round the head waters of the Nile, cattle were plentiful, and a large trade in hides could be organised. One of the chief sources of revenue was oil obtained from sesame and many oil-bearing trees, such as the butter-nut and several varieties of palms. With the coming of the Egyptians ground nuts had been introduced, and the natives had taken readily to their cultivation.

Cotton of a fine description was grown throughout the equatorial provinces. It was of all the products known there the most easily grown. Like the ground nuts, it was largely cultivated by the natives, who brought it in the raw state to the stations for sale. With this cotton, the very finest and strongest cloth was made by Emin's people, but as it was only made by hand the trade was capable of a very great extension. From the seeds of the cotton plant very good oil for common purposes was also obtained, and the cotton cake thus formed made excellent food for cattle. Mr. Fitzgerald, an expert planter, said, "The more I have seen of the country, the more I am impressed with its great adaptability for cotton cultivation. The black soil, with its freedom from stones, makes it, in my opinion, just the product suited for this country, and the ease with which it is cultivated would be all in its favour. It is, in tropical countries, a permanent product. It grows readily, is hardy, and apart from a little weeding and pruning (i.e., breaking off the dead sticks) the cotton is easily plucked and cleaned, and if the cultivation was at first introduced by Europeans, and the people shewn the ease with which it is cultivated, they would, I believe, readily take it up."

The growing of tobacco might also be developed into a great trade. The plant grew luxuriantly everywhere, but it was not properly manufactured, as the raw product was merely hung upon strings and dried in the sun but even then it was pleasant to smoke, and had a remarkably fine aroma. Sugar cane, wild indigo, and fibre plants grew freely and were indigenous in many parts of Africa which lie within the British sphere of influence. Cereals of many kinds as well as rice and oil seeds could be grown, greatly in excess of home requirements, and could be exported to India, the Red Sea, and the Persian Gulf. The cultivation of grain was capable of almost limitless development. In fact, within the British sphere of influence there were few necessities of life which could not be grown. India-rubber was one of the most important of the natural products of equatorial Africa, and it was of exceptional quality. This was a commodity in constantly growing demand, and round the head waters of the Nile an unlimited supply could be had by merely tapping the india-rubber vines which abounded there.

There was a great number of sheep in Central Africa, but he believed we should have to depend upon our wool supply upon Australia, New Zealand, and the Cape. There were in Central Africa many millions acres of rolling grass downs, but all these savannahs were so invested with ticks and other parasites that sheep would not, he thought, become sufficiently numerous to make Africa a wool-producing country.

Throughout the whole of Central Africa there was an abundance of iron ore which could be easily procured. Copper knives and ornaments were common features in Monbatta, Niammiam, and adjoining countries, where copper was found in large deposits upon the surface. In the Bahrel Ghazel province, at the taking of Dem Zehbir, large numbers of packets containing gold dust were found by Gessi Pasha's soldiers. Emin Pasha himself—a no mean mineralogist—told him (the speaker) that great quantities of gold-bearing quartz were brought to him from Lutuka, on the right bank of the Nile, immediately to the east of Lado. Soon after this discovery of gold had taken place Khartoum was captured, and the troubles fell on the province which prevented further investigation. All this vast store of possible merchandise would find its way through its natural channel by Uganda to the coast.

As he said before, Central Africa would hardly ever be a wool-producing country, but woollen stuffs, melior, baize, and buffa at present represented the most valuable trade money. Our wretched means of transport, however, practically prohibited much of this kind of material getting into the country except as presents to the chiefs. Blue serge and light red buffa were much sought after. Woollen and merino jerseys and good English-made blankets were greatly needed in the interior, but their weight and bulk made it impossible to get them there. They were the most coveted of all manufactured goods, and they would, if introduced, undoubtedly save much discomfort and mortality amongst the natives. He felt ashamed of the flimsy rubbishy cloths and tawdry ornaments at present imported into the interior, but they could expect nothing better until the cost of transport was greatly reduced. At present the transport cost five times as much as the goods themselves, even for so comparatively short a distance as 500 miles. It was useless to talk about extending trade in Africa without railways. The very want of health of Europeans in Africa was due in a great measure to the miserable transport. They were sent up country with insufficient clothes, insufficient food, insufficient medicines, merely because there was insufficient means of transporting the necessities of life. A great deal was put down to the abominable climate that really ought to be put down to the hardships and want of proper food, due to poor means of transport. As far back as the time when Stanley first entered Africa in search of Livingstone, he said nothing would ever be done until Africa was surrounded by an iron girdle, and his prophecy has been abundantly verified.

A glance at the map would shew that an enormous area of country would be opened up to trade by having a steamer on the Victoria Nyanza, which would carry the trade products of all the countries lying on that enormous coast line to the railway terminus at Eastern Uganda. The Somerset Nile might be utilised to connect the Victoria Nyanza with the Albert Lake, and an immense waterway might be obtained into the very heart of the richest countries in Central Africa through the White Nile, and all within the sphere of British influence. A steamer placed on the Victoria Nyanza would do more to stop the slave trade in a year than had been accomplished since we began to try to put it down. If only a portion of the enormous sum annually spent on slave trade bounties and the subsidy to Muscat were given towards building a railway—if only the Government would give some of the money it spent annually on its navy on the East Coast of Africa, towards providing a moderate guarantee for the railway from the coast to the great lakes, slavery would be abolished in a few years, the country would be developed, and the British taxpayer would be relieved from the heavy burden of maintaining a squadron of slave cruisers on the coast. What was wanted was a storm of public feeling so overwhelming that no Government would dare to ignore it in favour of granting the subsidy necessary to enable the British East Africa Company to build a railway from the coast to Lake Victoria. This was not a party but a State question. He had no personal interest in speaking for the Company, but he asked the Chambers of Commerce in the country to use their influence with the Government to induce them to carry into effect the recommendations of the Brussels Conference—a work which the British East African Company did its best to support. (Applause.)

Mr. W. TAYLOR, in moving a vote of thanks to Mr. Jephson, said that if the suggestion of Mr. Jephson could be carried into effect, it would be a great thing, and especially for Blackburn. They could do with any amount of foreign trade, for they could make any quantity of cotton cloth. During the last ten or fifteen years they had added a great many spindles, but no more looms, and he contended they would have to open up new markets. The town was not growing, and as they could not find all the young people work, it was equal to a reduction of the wages of the working people of the town.—Mr. J. WHITTAKER, in seconding the resolution, added that with the wealth of this country he thought the sum of two millions could be obtained for the railway that would open out Victoria Nyanza and all those

vast tracts of land to this country. The difficulty of raising the money was nothing compared with the difficulties that Mr. Stanley and Mr. Jephson had to encounter when they undertook the relief of Emin Pasha—Mr. W. THOMPSON and Mr. REDMAYNE supported the proposition, which, on being put, was carried with applause, and Mr. JEPHSON, in acknowledging the compliment, said it would be a good thing if something practical should come of that meeting. Some Chambers of Commerce had adopted a resolution memorialising the Government to grant a sum of money at moderate interest for building this railway. If they did the same, that would be the best thanks that they could give him.—The CHAIRMAN intimated that the matter would come before the next meeting of the Board.—A vote of thanks to the Chairman concluded the proceedings.

Foreign Correspondence.

TEXTILE MATTERS IN THE UNITED STATES.

BOSTON, FEB. 15th.

The carpet trade, like the little boy in the story, is crying out, *apropos* of Secretary Blaine's reciprocity schemes, "Me too!" It complains through one of its organs that in the various "reciprocity" arrangements made between the United States and other countries the carpet and the floor oil-cloth trades have been entirely ignored. "This has caused no surprise in the trades referred to, because they have become accustomed to such treatment, their interests having been so long ignored or actually discriminated against in both the legislative and the executive departments of the Government." And then the organ goes on to say that any remission of duties on carpeting or floor oil-cloths in Mexico, the West Indies, or any of the Central or South American States, would be useless while raw materials are taxed so heavily, the drawback clause being hedged about with extraordinary conditions with which manufacturers say they cannot comply. Table and stair oil-cloths and kindred goods being made on cotton foundations of domestic manufacture, and consequently untaxed, are in a better position. Kidderminster and other carpet centres in Great Britain, as well as Kirkcaldy, would do well to note this complaint amongst representatives of the floor-covering trade. There is no reason why the clauses of the Reciprocity Act should not be extended so as to apply to all articles of American manufacture. This was the idea which its framers had in mind, and British manufacturers may at any time hear that their South American trade has been placed in jeopardy by this reciprocity movement. In the case of the carpet trade the danger is especially great, for this industry now occupies a very strong position.

The report of the Bureau of Statistics on imports during the years ending June 30, 1890 and 1891, shew an increase of about 5,000,000 lb. in the quantity of third-class or carpet wools imported into the United States in the fiscal year 1891 as compared with the preceding year. But this increase in the amount of imports is not accompanied by an increase in their value, the figures shewing instead a slight decline. There are two reasons for this, one being the general fall in wool values, and the other the large proportion of unscoured wool in the imports of wool for the use of our carpet manufacturers during the fiscal year 1891. The importing of wool in the unscoured condition means the payment of freight on a vast quantity of dirt and grease; but this waste of labour and money has been forced upon the carpet trade by the ambiguous wording of the wool schedule of the present tariff and the strained interpretation which the Treasury Department has given to the terms "sorted," "scoured," and "washed."

Mr. Samuel Horner, of Philadelphia, has succeeded in producing his first lace curtain, 39 days after landing the machinery. Before the 1st prox. he expects to have three machines in operation, turning out 1,500 to 2,000 pairs of curtains weekly.

The stock of lace curtains and curtain nets carried at the New York agency of Wootton, Mosley, and Clifton, Limited, Nottingham manufacturers, was sold by auction on the 3rd inst. by Field, Chapman, and Fenner, at their new salerooms, 80 and 82, Leonard-street. Wootton, Mosley, and Clifton were petitioned into liquidation a few weeks ago, hence the sale. The offerings consisted of 27,000 pairs of Nottingham curtains, 2,500 bed sets, 4,000 pillow shams and 275 pieces of curtain nets. The sale was peremptory, and consequently the attendance was large. The goods were all disposed of, the prices realised being very fair in the cheaper grades, while the finer goods went at low prices.

Mr. William Barbour, of Paterson, connected with the Barbour Flax Spinning Co., has been elected treasurer of the National Republican Committee. Mr. Robert Barbour, of the same concern, returned home from Europe about the middle of December.

ERRATUM.—In the note on "The Southern Planter and Cotton Prices," in last week's issue, the figures of the imports in 1843-46-47 were given as £ sterling instead of lb.

THE *Policy-Holder* hears that the new Woollen Mill Tariff has been "shelved" for a little time.

THE new Cotton Mill Tariff seems to be hailed with general satisfaction in Yorkshire, inasmuch as it prevents the offices from getting into the same demoralised state as their Lancashire brethren. The new Tariff will not mean an increase in the rates for Yorkshire mills, as nearly all the offices have adhered to the 1880 Tariff, although in some cases a discount of 10% has been allowed, but against this there is the reduction in the spindle charge, so practically the premium income from them will not be altered. The general opinion seems to be that the rates for fireproof mills are very low, and from an insurance company's standpoint we would prefer to underwrite an amount on a boot and shoe salesshop at 2/6 per cent. than on one of the large fireproof Oldham mills at the same rate.—*Policy-Holder*.

MR. MICHAEL DAVITT'S BOYHOOD.—Written to about his early days in Haslingden, Mr. Michael Davitt has replied:—"The first mill in which I worked was one in Ewood Bridge. I think it was known as 'Parkinson's.' I only remained there a month, as the man for whom I was working as a 'bobbin tender' drank my wages (2s. 6d.) on the third week, and not being big enough at the age of ten to give him a taste of my clogs I left him. He was not the proprietor of the mill, but a mule spinner. My next place of employment was at a small mill owned by the late Mr. Lawrence Whitaker, half way from Haslingden to Grane. I only remained there a week, as an Irish boy, one John Ginty, of my own age, who lived with his parents next door to my own home, at Haslingden, was killed one morning at his work, and my father would not permit me to return again. I then got work at Baxenden in what was known as Stelfox's mill. I think that was the name, but I am not certain, and it was there I had my arm so lacerated through being caught between exposed cog wheels that it had to be amputated ten days subsequently. The accident occurred on the 8th of May, 1857."

THE CHICAGO EXHIBITION AND THE MCKINLEY TARIFF.—A meeting of the Committee on Textile Manufacturers was held yesterday week at the offices of the Society of Arts. Mr. Charles Malcolm Kennedy, C.B., chairman of the committee, presided, and said that the applications for space in the textile department were unsatisfactory, in consequence of the feeling against the McKinley tariff. He urged the importance of having a good representation of the textile industries of the country at Chicago, having regard to the number of visitors from all parts of the world who would go to the exhibition, and also to the fact that strenuous efforts would be made by the Americans, and also by the Germans, to divert the trade now carried on by English houses. Mr. Ellis admitted that a very bitter feeling had been aroused by the new tariff, and that this feeling, perhaps not entirely logical, rendered manufacturers but little inclined to take part in an American exhibition. Sir Henry Wood pointed out that the diminution in trade was not wholly due to the tariff. Other causes, such as changes in fashion, were accountable for part of it. The real effects of the tariff were much less than had been anticipated, and the tariff itself was not likely to be permanent. If the textile industry was not adequately represented at Chicago the effects on the industry could not fail to be mischievous. Mr. Bousfield said there was a natural and justifiable feeling of irritation against the tariff, but the question should be considered in its broadest sense, and he too felt that the non-representation of our textile manufacturers would be most injurious to the trade generally. Mr. Wardle thought that the duty of ex-

hibiting rested as much on the merchants as on the manufacturers. Mr. Barber stated that the linen manufacturers of the North of Ireland were fully alive to the value of the opportunity and that the industry would be well represented.

A TRADE CONSPIRACY IN FRANCE.—Great excitement has been caused at St. Etienne amongst all persons engaged in the ribbon trade, for the manufacture of which that city is one of the chief centres, by the discovery of an alleged conspiracy to betray valuable secrets of the trade to foreign firms. The discovery was due to a letter received a few days ago by a large ribbon manufacturer from an English merchant at Coventry, informing him of certain proposals he had received from an inhabitant of St. Etienne. This individual, who described himself as being well acquainted with everything connected with the silk ribbon trade, offered to sell all new patterns and novelties now on the looms, or to be produced by the manufacturers of St. Etienne for the coming season. He further promised to go wherever he might be required to set up special looms and to manufacture any of the novelties which might be selected. This letter was handed to the police, who immediately commenced an investigation. The individual of whom they were in search had only signed his letter to the Coventry manufacturer with his initials, and in order to establish his identity the police caused a registered letter to be sent from that city addressed to the given initials. This plan was perfectly successful, and the culprit turns out to be a well-known commission agent. A search has since been made at his residence, where the police seized a great number of letters proving that the accused had carried on voluminous correspondence with merchants and manufacturers abroad.

THE QUEEN'S ALPACAS.—Mr. William Fison writes to the *Bradford Observer* as follows:—"Sir,—Your correspondent Mr. T. Holroyd is right in his assertion that Mr. Gregory, of Shelf, was the manufacturer of some alpaca dresses for Her Majesty the Queen. The dresses were made with yarn spun from the fleeces of some alpacas kept in Windsor Park, and which had been imported into this country by his Royal Highness the late Prince Consort, in the hope that these animals might become acclimatised, and add an additional and useful variety to the production of home-grown wool. The experiment, I regret to say, was a failure, our climate proving fatal to the animals. The facts, as nearly as I can remember them, are briefly as follows:—Some time in 1844 Sir William Fremantle called upon Mr. Southey, a well-known London wool-broker, by desire of the Prince Consort, and stated to him that the Prince had some alpaca fleeces which he was desirous of having spun and woven into dresses for Her Majesty the Queen. Mr. Southey undertook to carry into effect the Prince Consort's wishes, and through the intervention of the late Mr. B. Pollock, of Leeds, the fleeces were sent down to Mr. James Whitley, of Morton, near Bingley, who was entrusted with the spinning of them. Mr. Gregory and the firm of William Fison & Co. were appointed to manufacture the yarns, and it was arranged between Mr. Gregory and myself that he (Mr. Gregory) was to weave some figured dresses, and my firm some plain ones. Mr. Holroyd is correct in stating that the design adopted by Mr. Gregory was the 'Shamrock, Rose, and Thistle.' The contribution of our firm was some plain and checked dresses. On Thursday, the second week of December, 1844, Mr. Gregory and I went to Windsor Castle, and had the honour of presenting to the Prince Consort in person the dresses. Shortly after our return home a public dinner was given in the Exchange Rooms, Bradford, in celebration of the honour which it was felt had been conferred upon the town."

Textile Markets.

COTTON.

MANCHESTER, FRIDAY.

There is little to report of change in our market. The accumulation of orders induced by the long continued dullness of business, which led buyers to hold off as long as they could, and the placing of which orders gave a little appearance of activity during the past fortnight, has apparently almost come to an end. This week there is a marked renewal of the dullness previously prevailing, buyers in all departments seeming to entertain the idea that a waiting policy will suit their purposes best. The consequence is that in the spinning section of the trade matters look as if they would speedily enter upon a crisis of some severity. Stocks are burdensome in most places, and while orders for distant and deferred delivery can occasionally be obtained, spinners do not care to entertain them on the present basis of prices. The problem, therefore, resolves itself into a question of a wide adoption of short time, with a possible alternative of a proposal for a general reduction of wages. The new federation of

employers, which has been remarkably successful in bringing within its compass a great portion of the trade, almost representing 20 millions of spindles, will take this subject into consideration this week. What the outcome may be it is premature to say and idle to speculate upon.

COTTON.—The market opened on Saturday very quietly, with a small spot demand and a limited business at unchanged prices. Some transactions took place on gradual delivery terms. Futures as a result of the day's work secured an advance of $\frac{1}{2}$ a point on the near position. A very depressed tone characterised both sections of the market on Monday. All growths were in slow request and the turn easier. After fluctuations futures closed with a loss of $\frac{1}{2}$ to 3 points. On Tuesday there was little change to record. The spot business was small, and prices were very slightly easier. Futures fluctuated slightly and within a very narrow range, closing quiet at a partial advance of half a point. On Wednesday there was very little change for the better, the only improvement being a little steadier feeling. Brazilian was reduced $\frac{1}{8}$ d., other growths being unchanged. Futures gained from $\frac{1}{2}$ to 1 point. Yesterday there was a further accession of weakness to the cotton market. The depressed outlook seems to have completely scared the speculating fraternity, both "bulls" and "bears" alike, and both have consequently almost retired from the market. Futures soon felt the effect of this, and commenced to recede, going down almost without a pause until they closed quiet at 3 to $\frac{3}{4}$ points decline. Spots also felt the effect, and American, Egyptian, and Indian all declined $\frac{1}{8}$ d.

The following particulars of the business of the week are from the official report issued by the Liverpool Cotton Association:—

	Import.	Forward.	Sales.	Stock.	Actual Export.
American	69,312	59,425	39,420	1,444,910	3,094
Brazilian	5,695	441	490	45,170	670
Egyptian	12,010	4,335	2,492	127,800	368
West Indian	6	295	550	28,830	2
East Indian	635	797	1,230	43,640	973

Total .. 87,654 . 65,263 . 44,180 . 1,690,350 . 5,107
The following are the official quotations from the same source:—

	G.O.	L.M.	Md.	G.M.	M.F.
American	3 $\frac{1}{8}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{4}$	4 $\frac{1}{2}$
				M.F. Fair.	G.F.
Pernam	4 $\frac{1}{8}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$
Ceara	4 $\frac{1}{8}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$
Paraiba	4 $\frac{1}{8}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$
Maranhm	4 $\frac{1}{8}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$
	Fr. G.F. F. G. F. Gd.				
Egyptian	4 $\frac{1}{8}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	5 $\frac{1}{2}$
Ditto white	4 $\frac{1}{8}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	5 $\frac{1}{2}$
	Fr. F.F.G. F. G. F. Gd. F. G. Fine.				
M.G. Broach	—	—	—	3 $\frac{1}{8}$	3 $\frac{1}{2}$
Dholerah	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{8}$	3 $\frac{1}{2}$
Omra	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3	3 $\frac{1}{8}$	3 $\frac{1}{2}$
Bengal	—	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{8}$	3 $\frac{1}{2}$
Tinnivelly	3 $\frac{1}{8}$	—	3 $\frac{1}{4}$	3 $\frac{1}{2}$	—

* Nominal.

The following are the values of futures at mid-day on each day of the week—American deliveries—any port; bases of middling; low middling clause; (the fractions are in 64ths of a penny):—

PRICES OF FUTURES AT 1.30 P.M. EACH DAY.

	Satur-day.	Mon-day.	Tues-day.	Wednes-day.	Thurs-day.	Friday.
February	3-45 46	3-43 44	3-42 43	3-42 44	3-41 42	3-39 40
Feb.-Mar.	3-45 46	3-43 44	3-42 43	3-42 44	3-41 42	3-39 40
Mar.-April	3-47 48	3-44 45	3-43 44	3-44 45	3-41 42	3-39 40
April-May	3-50 51	3-48 49	3-47 48	3-47 48	3-45 46	3-43 44
May-June	3-53 54	3-51 52	3-50 51	3-51 52	3-48 49	3-47 48
June-July	3-56 57	3-55 56	3-54 55	3-54 55	3-52 53	3-50 51
July-Aug.	3-60 61	3-58 59	3-57 58	3-58 59	3-55 56	3-54 55
Aug.-Sept.	3-63 64	3-61 62	3-60 61	3-61 62	3-58 59	3-57 58
September	4-2 3	4-0 4	3-63 64	4-0 4	3-61 62	3-60 61
Sept.-Oct.	4-2 3	4-0 4	3-63 64	4-0 4	3-61 62	3-60 61
Oct.-Nov.	—	4-3	—	—	—	—
Nov.-Dec.	—	4-6	—	—	—	—

Price of Mid. American.	3 $\frac{1}{8}$	3 $\frac{1}{4}$	3 $\frac{1}{2}$	3 $\frac{3}{4}$	3 11-16	3 13-16
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Estimated Sales including Spec. and Export.	6,000	8,000	8,000	8,000	8,000	7,000
	1,000	1,000	2,000	1,000	1,000	1,000

YARNS.—The chequered report of the market, to which we referred last week, was justified by the examination of the results of the week, though it was more accentuated in cloth than in yarns. On Saturday there was the usual indifference to attempting business. Prices were the turn in favour of buyers on the week. On Monday it was evident that there was a falling-off in the enquiry for yarns. The business put through was small, and at slightly easier rates. On Tuesday

the business that passed in yarns was slow, and of a retail character, and prices for prompt delivery were easier. A few orders for quantities for distant forward deliveries were available, but at prices that spinners were indisposed to accept. It would seem as if a crisis was approaching in the spinning branch of the trade, as producers will be compelled to take the state of business unitedly into their most serious consideration. On Wednesday there was no improvement, and spinners who had not succeeded in effecting moderate sales during the past fortnight were anxious sellers, and easy to deal with for prompt delivery. Yesterday yarns were depressed, and prices became irregular, some spinners inconvenienced with stocks submitting to rather large reductions for prompt delivery. All round, under the further lapse in cotton, the demand was poor.

CLOTH.—Last week's results in the cloth section shewed rather better than was anticipated, this accruing almost mainly from transactions on Eastern account, operations having been moderate both for India and China. On Monday the enquiry for cloth shewed some subsidence in the demand, buyers evidently having given out their more urgent and practicable orders. Manufacturers who had secured business were correspondingly firmer. These features of the market shewed themselves still more plainly on Tuesday. There was less demand for cloth, whilst there was more regularity and firmness amongst producers on the basis of the business put through for the Eastern outlets during the past fortnight. Still the minor sections of the market are much neglected. On Wednesday a little more enquiry on Eastern account revealed itself than might have been predicted from Tuesday's experience, yet prices are so exceedingly unsatisfactory that producers avail themselves of the slightest opportunity for attempting to improve them. Yesterday there was still some enquiry on India and China account, and where producers were willing to anticipate a further decline in cotton, fair parcels might have been obtained. The other departments of the cloth market are all quiet.

To-day the market is quieter in all departments. The renewed relapse in cotton is causing buyers to hold aloof more markedly than before.

FLAX AND JUTE.

DUNDEE, WEDNESDAY.—The market continues in a most unsatisfactory state. Pressed by the dear jute and the unprofitable prices of manufacturers the trade have agreed to stop on the Saturdays. This arrangement comes into force a month hence. Instead of responding by hardening prices, foreign markets were almost absolute stagnation as their reply to this resolve of the Dundee Trade. Jute remains firm in all positions, with really nothing of consequence doing to test the market. Yarns are flat at 1s. 10d. for 8 lb. cop, and 1s. 11d. for 8 lb. warps. Hessians are very irregular in price. Some buyers who hold cheap stocks are sellers under manufacturers' prices. On the other hand, for hide goods with colour and quality which can be trusted, there are buyers at the most extreme prices, and, indeed at over list prices. But the difficulty, of course, is to get such goods, as this season's jute is so very unsatisfactory in quality. Much of it has been packed damp, and heart-damage is the common result. The losses from this one cause are truly serious. Flax is firm, but is not dearer. K is offered at £18. Tows are very firm, and are held for a rise of quite £3 a ton. Linsens are wanted; the low price and the excellent quality of these goods create a demand. Never were linen goods more worthy of the attention of buyers. All the looms in Fife and Forfar are well engaged, and prices tend decidedly upwards. The Dundee Fancy Jute Trade is depressed; only the best makers are busy. Their choice new designs have stood them in good stead. Most of the makers are trying other fabrics to keep their looms going. Twines and cords are in active demand. Arbroath, with its heavy canvas, remains exceptionally depressed. In this branch of the linen trade there seems to be more making than the trade requires.

DRY GOODS.

MANCHESTER.—There is a quiet feeling this week, travellers' orders having proved unsatisfactory in volume. The dulness is noticeable in most departments, the heavy branches being markedly affected. The position of sellers of jute and linen goods is very unsatisfactory. An advance of about $\frac{1}{2}$ d. per yard is asked by sellers of standard Hessians and striped beddings, but it is doubtful whether over $\frac{1}{2}$ d. has been as a rule obtained thus far. The increase, however, is very small in view of the fact that jute has doubled itself in price since last year. For damasks and other grades of fine linens the enquiry is small. Competition is now very keen, such firms as the Brookfield Company, which did not formerly make an active canvass for orders, having now been compelled to follow the

example of others. The silk trade is fairly steady. Ladies' scarves are in brisk request, but the activity in ladies' handkerchiefs is not large. Men's silk handkerchiefs and mufflers are steady. Linoleums and carpets remain quiet. The demand for some time has been very slow.

HOSIERY AND LACE.

NOTTINGHAM.—The weather has been unfavourable to any development of business in the home trade. Manufacturers in several branches are much depressed at the paucity of orders for millinery lace. Parts of the shipping trade are also languid, but here and there some good orders have been placed for specialties for America. There has been a renewed demand for Irish guipure, and combinations of Point de Paris laces, and half flouncings, for robes and other millinery purposes, giving full employment to the machines occupied with the most favoured of the recent novelties, some of which have been specially engaged. The sales of silk full nets and veillings are well maintained, reaching to a considerable aggregate amount. There is a moderate enquiry for black silk laces, flouncings, and nets, but it is not sufficiently pronounced to encourage manufacturers to increase the amount of machinery now employed. The French competition remains very active, and large quantities of goods are sent into the London market. Black silk tulle are moving in good quantities, and there are also special orders for white silk and cotton tulle for certain markets. The demand for cotton stockings and socks is scarcely up to the average, and prices remain unprofitably low. Shirts and pants are in steady request, but orders are carefully placed. Cashmere and merino stockings and half hose are selling fairly well in black and in colours. Manufacturers of pure wool goods are moderately engaged. The silk frames occupied with gloves, stockings, and half-hose are doing a steady business, prices being favourable to buyers.

WOOLLENS AND WORSTEDS.

LEEDS.—Woolen cloth manufacturers are experiencing a good all-round demand, but while the turnover is large, it is certain that goods are selling at little above what they cost the producer, except first-class novelties in worsteds and serges, which are eagerly taken by foreign buyers. A large proportion of the spring orders now placed are for future delivery. Black and blue serges in the better qualities have a good sale for suitings. A good deal of favour is also shown by large buyers to cheviot tweeds in brown mixtures. The rate of demand is about the same as respects strong, hard-wearing tweeds. Some printed meltons brought out in new colours are so low in price that they are used largely for working men's suits. Vicunas also are in occasional request. Black worsted coatings in small diagonal makes are also ordered freely for the ready-made clothing trade. Costume cloths and dress fabrics are in steady demand. The market for plain woollens in subdued colours at former quotations is well maintained. There is no improvement in the shipping trade.

GLASGOW.—Messrs. Ramsey and Co., wool brokers, in their report dated 23rd February, say:—Wool: There is no new feature in the wool market this week. The home trade is still quiet, and there is only a moderate quantity being taken up for shipment. The tone of the market is weak all round. Sheep skins: The supply has reached a fair average, and of good sorts. Trade continues somewhat irregular, owing to dulness in the sales of both wool and pelts.

LONDON.—Messrs. Schwartz and Company, in their report dated 22nd February say:—The first series of London sales of Colonial wool, which commenced on the 26th ulto., closed on the 20th inst., the following quantities having been catalogued:—

Sydney	101,021 bales against 106,434 bales
Queensland	59,311 " " 40,589 "
Port Phillip	65,833 " " 87,408 "
Adelaide	19,037 " " 34,160 "
Tasmania	263 " " 328 "
Swan River	2,539 " " 3,584 "
N. Zealand	26,271 " " 15,612 "
Cape	37,957 " " 49,335 "

Total.... 313,132 bales against 328,450 bales

The net total available amounted to 314,000 bales. Of these 290,000 bales have been sold, 105,000 bales for home consumption, 169,000 bales to the Continent and 16,000 bales to America, leaving 24,000 bales to be carried forward to next sales. The series opened with prices for Australian grease at from par to $\frac{1}{2}$ d. below the December level, a decline which in the course of the sales was gradually increased by a further $\frac{1}{2}$ d. Superior Victorian wools at first escaped the fall, thanks to the keen American competition, but the demand for that quarter slackening they lost their favoured position. Queensland shewed the fall strongest

In the corresponding series of last year.

and were among the cheapest wools, but exhibited steadiness towards the close, while fine Sydneys which had declined less markedly remained weak and irregular of sale. Fineness of quality, so often an object of rarity and of keen demand, has on this occasion been neither the one nor the other; the present clip abounds in fine silky wools and they have commanded no premium. Deep and sound grown wools have on the other hand been comparatively few and have derived advantage from their scarcity. The prices for scoured wool ranged from 1/2d. to 1 1/2d. below December and exhibited much irregularity especially in medium sorts, which shew the fall most. The best classes declined proportionately least and sold with fair steadiness at the close. Among cross-breeds the finest sorts were in but weak demand and prices receded 1d. to 1 1/2d. below December. For the lower sorts there was better enquiry and a full 1/2d. probably covers the fall in their case. Lambs' wool was in brisk demand during the greater part of the series, but prices became rather weaker in the concluding days. The fall on *Capes* may be quoted as follows:— On good snow whites 1d., on medium 1/2d. to 1d., and on fleece and grease a full 1/2d. per lb. The sales have been well attended and though the tone has dragged at times the competition at current values has on the whole been good, the last two or three days being in point of animation among the best of the series. Wool looks cheap; whether it is so will depend upon whether manufacturers can work it up at a profit. This was distinctly the case in the Spring of 1886—a period of similar and even greater depression—but it is questionable whether it is so now. The trade in 1886 was altogether better circumstanced than at present; it was not a year in which very large supplies were apprehended, the industry was not hampered by hostile tariffs, and the consuming power not impaired by famines, raised corn prices and heavy financial losses. Only in a political respect is the comparison favourable to the present time, which is free from the warlike apprehension that was rife in 1886. Still, making allowance for all, the prices of wool seem now so low as to begin to deserve attention. Inferior wools can hardly fail to be displaced by the cheap Australian merinos—fine and silky this year such as they have rarely been—and only a slight improvement seems needed to make the industry which at present has reduced its output, resume full work, when its powers would be amply able to cope with the supplies that are in prospect.—The following shews the supplies and deliveries of Colonial wool as compared with last year:—

LONDON MARKET:—		1892.	1891.
Held over from December	5,000	12,000	
Net imports for the first four series	309,000	318,000	
	314,000	330,000	
	Bales.	Bales.	
Home consumption	105,000	120,000	
Export	185,000	200,000	
Total sold	290,000	320,000	
Held over	24,000	10,000	
DIRECT PURCHASES:—			
Home consumption, forwarded direct	62,000	25,000	
Foreign " forwarded via England	29,000	27,000	
" " direct imports	55,000	24,000	
Total	146,000	76,000	
TOTAL CONSUMPTION:—			
Home consumption	167,000	145,000	
Continental "	241,000	270,000	
American "	28,000	22,000	
Total deliveries	436,000	436,000	

The quantity sold in the London sales—290,000 bales against 320,000 bales last year—shews a falling-off of 30,000 bales, but as the direct purchases—146,000 bales against 76,000 bales—are larger by 70,000 bales, there is an increase in the total deliveries of 40,000 bales. No particular feature marks the distribution of the wools between the Home and Foreign trades. The next series has been fixed to commence on Tuesday the 29th March, all arrivals up to that date being admitted. To give an accurate estimate of the probable net total that will be available is impossible, as the time of passage required by sailing vessels cannot be calculated; but if pressed for a guess we should say between 350,000 and 400,000 bales. Bank rate 3%.

Patents.

PATENT OFFICE.
DUTTON & FULTON
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 1, ST. JAMES' SQUARE, MANCHESTER.
 ESTABLISHED 39 YEARS.
 Handbook on Patents, Designs and Trade Marks gratis and post free.
 Telegrams: "Dofus, Manchester." Telephone 762.

SPECIFICATIONS PUBLISHED.

1891.

- 3,707 AMBLER and MOSS. Leather belting. 4d.
 - 4,898 JAGGER. Cop tubes. 6d.
 - 5,115 FROST. Opening and cleaning cotton, etc. 8d
 - 5,178 EDGE. Preparing and spinning machines. 8d.
 - 5,408 WREN, H. and H. C. Balling thread. 6d.
 - 5,846 WHOWELL. Stretching fabrics, etc. 8d.
 - 6,444 COOK and HARRISON. Preparing and spinning fibrous materials. 8d.
 - 9,350 MURPHY. Winding yarns on bobbins. 8d.
 - 9,688 SMITH. Mats for covering boilers, etc. 4d
 - 10,525 WARRINGTON. Terry fabrics. 8d.
 - 12,331 SHEPHERD (*Kristek and arr.*) Size. 4d.
 - 13,549 GEARHART. Circular knitting machines. 6d.
 - 13,775 MORTON, J. and W. U. Sewing machines. 8d.
 - 16,455 BECK. Jacquard machines. 11d.
 - 16,720 BOULT (*Bergmann*). Untwisting ropes. 6d.
 - 20,349 TEMMEL. Driving belts. 6d.
 - 21,809 ULICI. Loom shedding motions. 6d.
 - 22,623 IMRAY. (*La Société L. Luvand Huguenin and Cie.*) Colouring matters. 4d.
 - 22,705 WELDON. Yarn-dyeing machines. 11d.
 - 22,717 WELDON. Yarn-dyeing machines. 8d.
- REPRINT (with alterations).
 9,096 (1891). GESSNER. Teaseling machines. 1s. 1d.
 16,353 (1889). GREAVES. Smoke consuming apparatus. 6d.
 4,688 (1891). JOHNSON (*Badische Anilin and Soda Fabrik*). Colouring matters. 6d.

Joint Stock and Financial News.

NEW COMPANIES.

SOCIETE COTONNIERE D'HELLEMMES, LIMITED.

Capital, £50,000 in £10 shares. Object, to carry on in France the businesses of cotton spinners, doublers, and manufacturers, and general workers of cotton and other fibres; to deal in cotton, cloth, yarn, and other materials relating to the above businesses, as merchants, or on commission, or as agents; and with a view to the above objects, to acquire certain lands and premises situate at Hellemmes, Lille, or elsewhere in France. Subscribers:—

- C. S. Lings, Shaw Brook, Burnage, Manchester
- F. B. Ross, Red House, Alderley Edge
- W. H. Ingram, 15, Oak-road, Withington, near Manchester
- C. E. Ross, Wilmslow
- A. W. Galloway, Knit Mill, Manchester
- R. Lord, Nelson Mills, Bolton
- J. H. Hayes, The Limes, Leigh
- T. W. Shaw, Sweetloves, Sharples, Bolton

The first directors are C. S. Ling, F. B. Ross, W. H. Ingram, Charles Eckersley, T. W. Shaw, and J. P. Lord. Qualification, £1,000. Remuneration; £1 1s. for each board attendance.

W. LOCKWOOD AND CO., LIMITED.

Registered by A. M. Bradley, 42, Lombard-street, E. C., with a capital of £5,000 in £10 shares. Object, to carry on in all its branches the business of woollen, worsted, serge, and textile manufacturers and merchants, and cord cutters in all their respective branches. Most of the regulations contained in Table A apply.

GEORGE ANDERTON AND SONS, LIMITED, CLECKHEATON.

Capital, £92,000 in 900 shares of £100 each. Object, to acquire the business of wool combers and spinners hitherto carried on by George Anderton and Son, Victoria Mills, Cleckheaton, with the lands, works, mills, factories, and premises upon and in which the same is carried on. Subscribers:—

- | | Shares. | Ord. | Pref. |
|--|---------|------|-------|
| W. Anderton, Elm Bank, Cleckheaton | — | .. | 1 |
| C. P. Anderton, Round Hill, Cleckheaton | 1 | .. | — |
| A. Anderton, Field Head House | 1 | .. | — |
| Catherine Anderton, Round Hill | 1 | .. | — |
| Mary Anderton, Fieldhead House | 1 | .. | — |
| W. E. Anderton, Ambleside, Woodford Green, Essex | — | .. | 1 |
| Edith Balkwill, 14, Old Cavendish-street, London | — | .. | 1 |

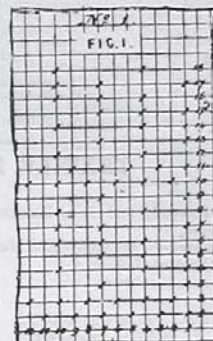
The first directors are William Anderton, C. P. Anderton, and Arthur Anderton. Remuneration to be determined.

ABSTRACTS OF SPECIFICATIONS.

13,010 August 19, 1890. **Dyes.** W. MAJERT, 10, Madistrasse, Berlin.

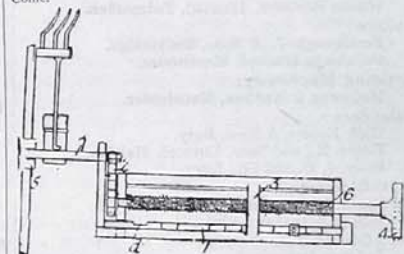
Rhodamines.—Relates to the manufacture of acid rhodamines. Consists in heating *alpha* or *beta*-sulpho-phthalic acid with one of the anhydrides, or secondary acid salts thereof, with one of the following meta-aminophenols or with the ethers thereof, viz.:—*m*-ethyl-, *m*-dimethyl-, *m*-diethyl-, *m*-methyl-ethyl-, *m*-phenyl-, *m*-tolyl-, *m*-*p*-tolyl-, *m*-xylyl-, or *m*-naphthyl-amidophenol. For example, anhydrous sulphophthalate of soda and ethylamidophenol are heated in a closed vessel for eight hours at 170°–175° C., the product is dissolved in water and acidulated, and the colouring matter is precipitated by common salt. It is unaffected by acids or alkalis, has the same fluorescence as basic rhodamines, but is insoluble in ether. 6d.

13,073 August 20, 1890. **Pile fabrics.** N. HORWOOD, 13, Lower Green, Astley, near Manchester.



Ribbed pile fabrics, known as cotton cords or fustians, are woven with eighteen ends to the "gait-over." Each warp end is drawn separately in a heel, excepting the face ends, which are drawn in two together. The diagram shows a cotton cord with a twill and calico back combined. 6d.

13,079 August 20, 1890. **Looms.** G. GANTHORPE, 12, Stone Edge View, Barrowford, near Nelson, Grindleton-cum-Cole.



Stop-motion; indicating lengths woven.—Apparatus for stopping the loom when a certain length is woven, and for indicating the number of lengths woven. A piece 3 traversing a screw 5, which is rotated by a pin wheel 4 bearing against the cloth, supports the pivoted bar 1 until the slot *d* is reached, whereupon the bar falls. Its curved end thus allows a finger 2 (pivoted in a bracket 5 on the web-foke holder) to fall on to the web hammer and so to stop the loom. The finger also engages a numbered tooth wheel 7 and carries it forward a tooth, this wheel thus indicating the number of lengths woven. 8d.

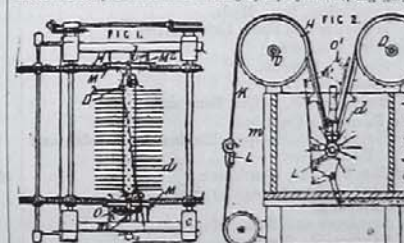
13,098 August 20, 1890. **Jaquards.** W. T. STANLEY and W. A. WASS, New Basford, Nottingham.



The ends of the needles, formed in some cases with studs E, fit into steel tubes B which bear against an imperforate plate. The tubes are split at the end B2, and contain springs A pressing on the needles. 6d.

13,181 August 21, 1890. **Dyeing.** G. F. PECK, 14, Temple-street, Providence, Rhode Island, U.S.A.

Cop machines.—Relates to apparatus in which a few spindles only at a time are connected with the suction pumps. Over a series of wals are mounted shafts D carrying sprocket wheels H for driving chains K, to which can be fixed, permanently or removably, carriers L with nipples for receiving the cop spindles *d*, and connected by flexible tubing D2 with suction pumps. Within the carrier is a slotted valve tube, the spindle of which carries a piston for gearing with segments Q and O, which are operated by a hand lever for rotating the valve and putting successive rows of cops in connection with the pump. The carriers L are prevented from rotating by a projection J, engaging



the guides M, M2. When the operation in one vat is finished, the carrier L travels with the chain K to the next vat, stopping on the way to be put in connection with the pump J for exhaustion

of excess of liquid, the valve being operated in this case by the segment *O*. 24d.

13,192. August 23, 1890. **Raising pile fabrics.** W. D. WATSON, Horse Carrs, Rochdale.

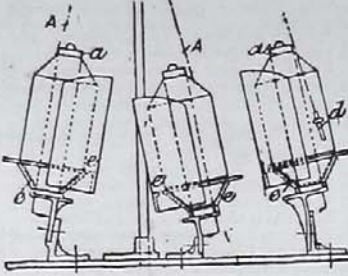
For raising "seal-skins" and the like two discs provided with pins or tenter hooks are mounted, so as to be oppositely inclined, upon a right and left hand screwed shaft, which may be turned by a hand wheel and gearing, to adjust the discs. A slow revolving motion is given to the discs. The fabric is fed on to the discs and carried round and distended thereby. A series of pivoted sticks strike sharply on the face of the fabric. The latter may be supported whilst being "latted" by two bars, and, in some cases, a metal plate may extend from bar to bar and be heated by gas, etc., to heat or dry the fabric. Feed and delivery rollers are provided. 24d.

13,225. August 22, 1890. **Dyes.** R. WILLCOX, 47, Lincoln's Inn Fields, Middlesex.—(The Farbenfabriken vorm. F. Bayer and Co.; Elberfeld.)

Also dyed.—Consists in combining a tetrazo compound with one molecular proportion of salicylic acid, or of *o*- or *p*-cresol carboxylic acid, and then with one molecular proportion of *alpha*-naphthylamine, or of *alpha*-amidonaphthol ether, or *vice versa*, and subsequently diazotising the resulting amido compound and combining the diazo compound with an amine, or a phenol, or a sulpho acid thereof. Examples are given in which are used (1) tetrazo-diphenyl, salicylic acid, *alpha*-naphthylamine, and *alpha*-naphthol-*alpha*-monosulpho acid; (2) tetraazodiphenyl, salicylic acid, *alpha*-amidonaphthol ether, and dihydroxynaphthalene monosulpho acid S.; (3) tetraazodiphenyl, salicylic acid, *alpha*-naphthylamine, and *beta*-naphthylamine disulpho acid G.; (4)

tetraazostilbene disulpho acid, salicylic acid, *alpha*-naphthylamine, and *m*-phenylene diamine. 64d.

13,272. August 23, 1890. **Spinning.** W. H. RUMON, 5, Lime Grove, Longsight, Manchester.



In machines for preparing and spinning cotton and other fibrous materials, the sliver, slubbing, or roving *A* is drawn from fixed delivery bobbins *a* whereby a turn of twist is put into the

sliver for each coil withdrawn from the bobbin. To facilitate unwinding and to prevent the sliver as it is drawn off from becoming entangled with the portion which still remains on the bobbin, the sliver is passed through a tube of provided near its upper end with a collar, as shown. The bobbin spindle is fixed in an inclined position, and is provided with a shield *z*, which partially supports the tube *z* when on the underside of the bobbin. For the purposes of this invention the sliver is prepared with less twist than usual, the rollers being driven at a greater speed with relation to the spindles than is usually the case. 24d.

13,379. August 26, 1890. **Jacquard weaving.** J. EDWARDS, Manchester Mill, Preston.

In double lift jacquard weaving the strings or heads actuating every alternate warp-end are tied up to the hooks of one lift, whilst the other strings are tied up to the other, whether singly or in clusters. By this means a more developed pattern may be produced. 44d.

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